

Air Conditioning System

If you need a highly efficient air conditioning system in your building, LG **MULTI V.** is the right choice for you.

# Great Company Great People



Test Tower

#### **Brief History**

#### Establishment

1947	Establishment of the LG Group
1958	Establishment of LG Electronics Inc.
1962	Establishment of Digital Appliance Company
Growth	
1968	Manufactured Korea's first air conditioners
1985	Introduced Korea's first Inverter air conditioners
1986	Exported Korea's first window-type air conditioner
U.S.	
1989	Won the approval of "UL's MDP & CSA's EEVP"
1993	Obtained ISO 9001 Certification from "BSI-QA"
1994	Export Records US\$ 100 Million

#### Global

1995

Establishment of LGETA in China

#### **Expansion**

1997	Establishment of LGEIL in India
1999	Establishment of LGEAT in Turkey
1999	Establishment of LGEMH in Vietnam
2001	Establishment of LGEAZ in Brazil
2002	Establishment of LGETH in Thailand
2002	Establishment of LGEIN in Indonesia
2004	Turnover of US\$1.4 Billion dollars
2006	Achieved No.1 position for 7 years (2000~2006)

# LG Air Conditioner Global



LG Air Conditioning Division, Korea



LGE Tianjin Appliance Co., Ltd. China



LG Electronics Thailand



LG Electronics Arcelik Turkey



LGE New Delhi Ltd., India



LGE Haiphong Inc., Vietnam



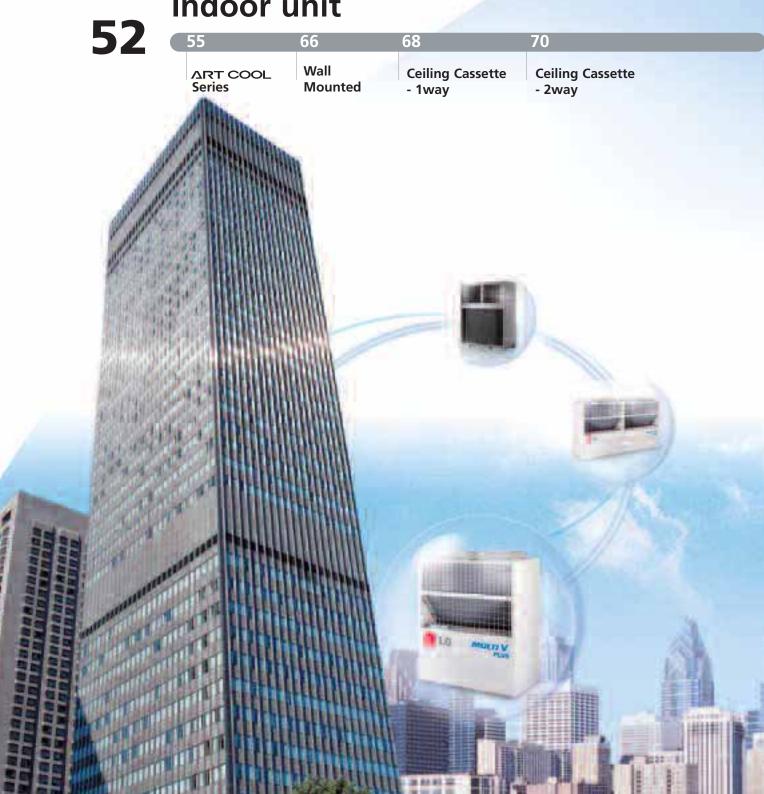
LGE da Amazonia Ltd., Brazil

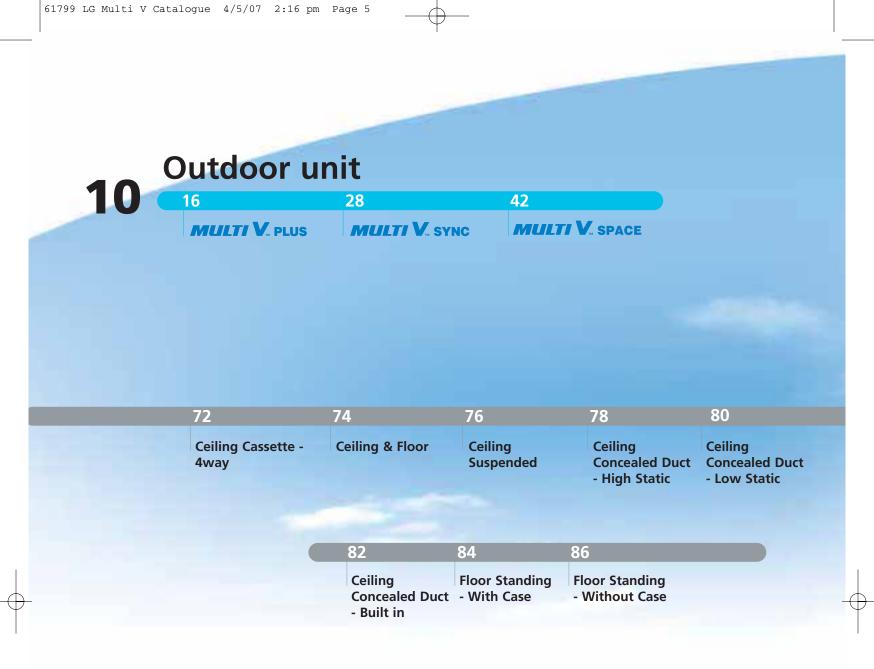


LG Electronics Indonesia



# Indoor unit

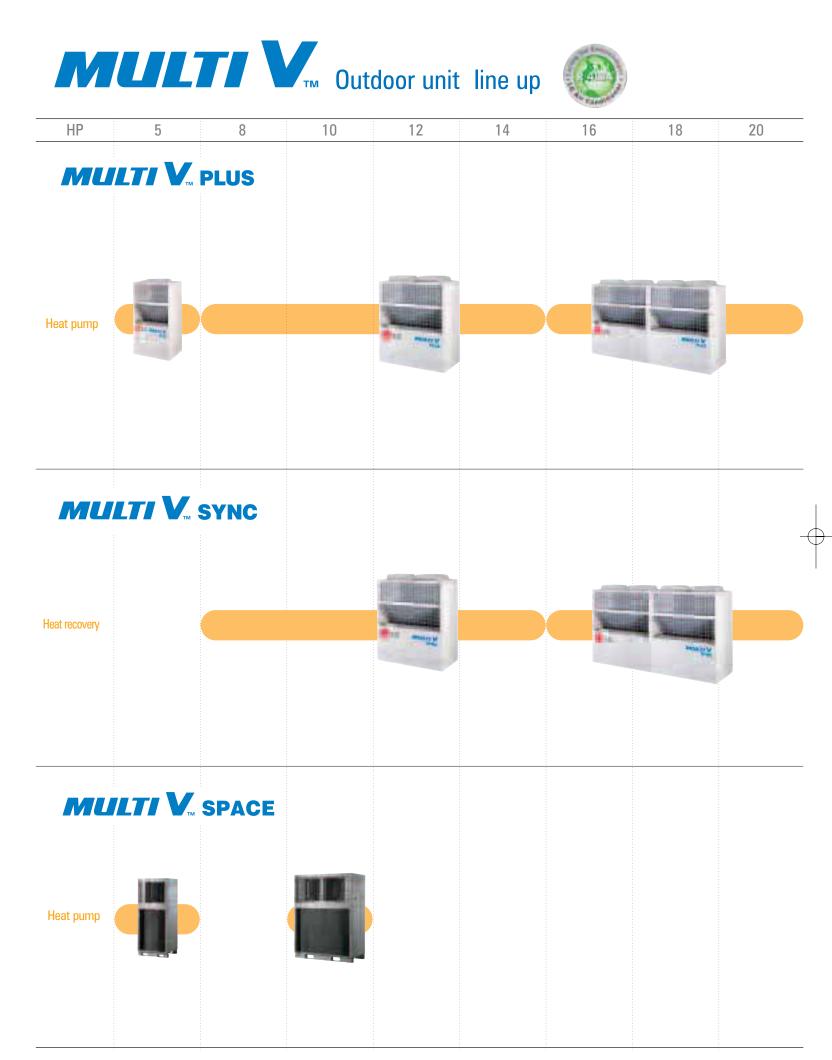




## **Network solution & Accessory**

<b>JU</b>	90	92	93	94	95	96	97	98
		Simple Central Controller	Deluxe Central Controller	PC Based Central Controller	PDI	BNU-LW	BNU-BN	Accessory





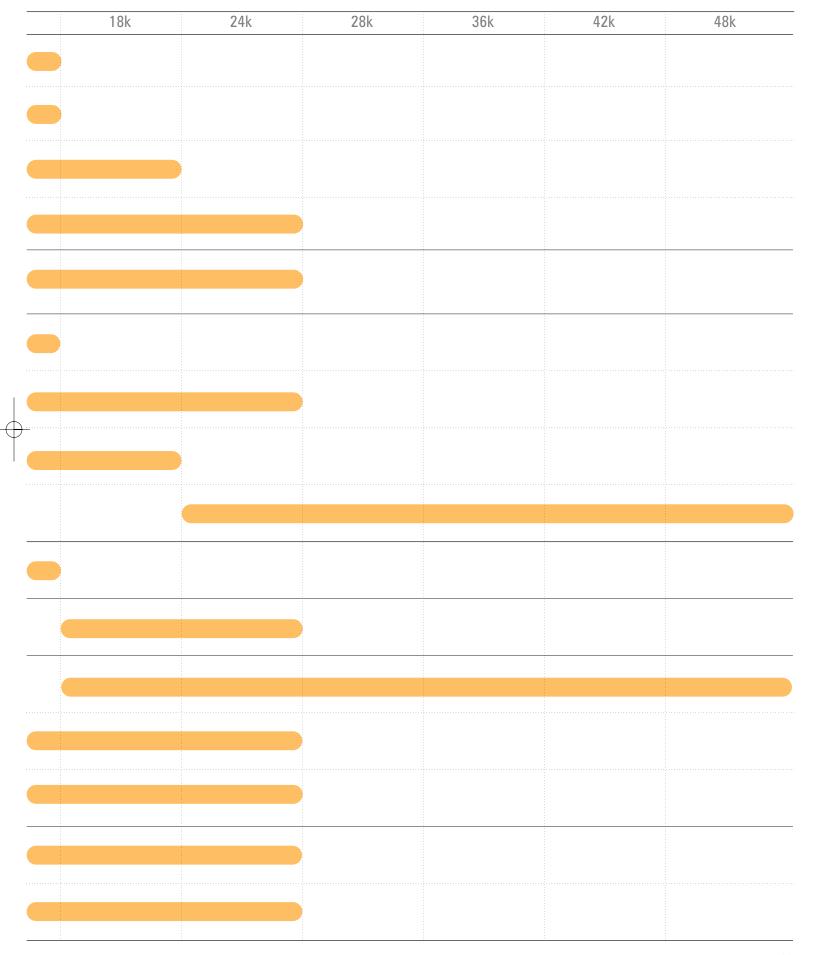


# MULTI V. Indoor unit line up



	Btu / h		7k	9k	12k
ART COO	Panel				
Series	Wide				
	Mirror				
SRAC	Wall Mounted	-			
	1way				
Ceiling	2way				
Cassette	4way (570*570)				
	4way (840*840)				
Ceiling & Flo	or				
Ceiling Susp	ended				
	High Static				
Ceiling Concealed Duct	Low Static				
	Built-in				
loor	With Case				
Standing	Without Case				

**08** \_ Air conditioning system

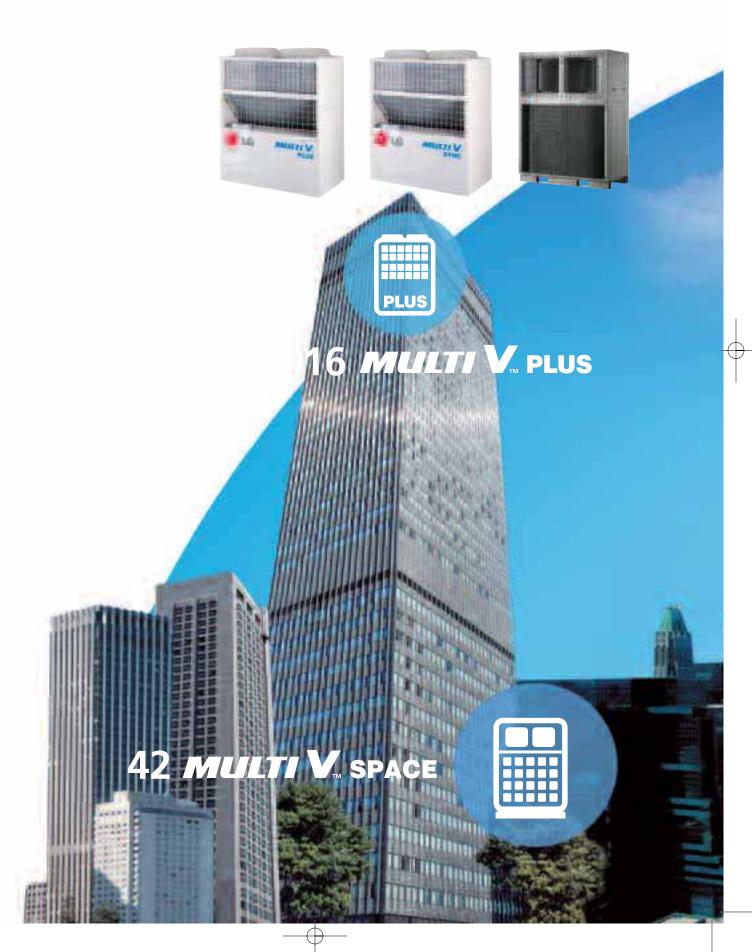


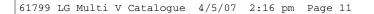
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Air conditioning system \_ 09

# MULTI V. Outdoor unit

The MULTI V system is composed of serially arranged refrigerant piping, and multiple indoor units connected to one outdoor unit. It is a highly efficient system that offers outstanding energy reduction, simple and easy design and installation, and the ability to connect to many types of indoor unit for all types of application.







MULTI V. SYNC 28

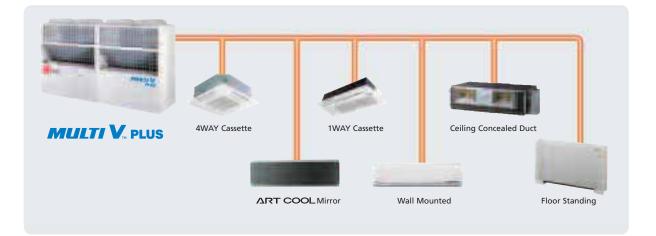


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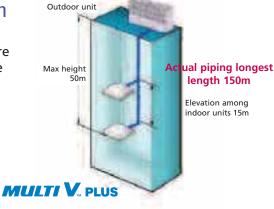
#### A line up with a wide range of model/capacity selection

The various selection of outdoor units coupled with the wide range of indoor units, means that the **mutri V** system has the ability to make any space comfortable whether it be a small shop, residential application, or large office building.



#### Longer field piping runs for flexible installation

With a maximum pipe run of 150m from the outdoor unit to the furthest indoor unit, there is greater choice of where the outdoor and indoor units can be positioned. Therefore the **MULTIV** system is suitable for installation into most types of building.





# Outdoor unit

**MULTI V.** incorporates inverter compressor and fan motors.

## Why inverter?

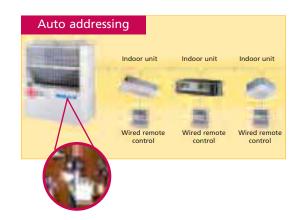
- Higher efficiency
- Reduced operation noise
- Less vibration
- Enhanced capacity control



#### Automatic addressing between outdoor and indoor units

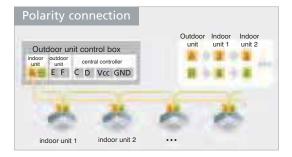
The addressing between outdoor unit and indoor units is carried out by the touch of a button. When the addressing is complete, the system is ready to run.

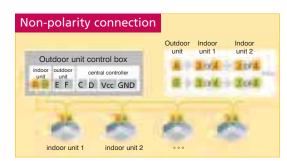




#### Non-polarised communication wiring

The communication wiring can be installed polarised, non-polarised, or a combination of the two, and the outdoor unit will sort out the mistakes during automatic addressing.





PLUS



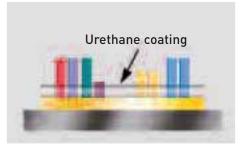


Pursuing the market needs of high energy efficiency and environmental friendliness.

#### Urethane coated PCB

- Protects PCB from oxidization
  Prevents errors that may be caused by moisture and dust
- Strengthens electrical insulation
- Kepts components stable from vibration.





#### Indoor unit with interior concept

Indoor units with unique stylish designs blend in with refined interior.





# Outdoor unit

#### Neo Plasma Air Purifying System (applied models only)

LG's unique NEO Plasma Air Purifying System is equipped with 7 specialized filters in 5 separate stages to enhance its cleaning power. It reduces fine dust and mold, unpleasant odors and cigarette smoke as air passes through each filter.



#### 1. Pre Filter

The antibacterial pre-filter primarily reduces large dust, mold and quilt dust.

#### 2. Nano Carbon Filter

Nano-size carbon filters removes fine odorous particles from the household air resulting in a more pleasant environment.

What is Nano Carbon Ball? Microscopic sized (1/100000000) filter to ensure optimal filtration of odors.



#### 3. Triple Filter

The triple filter consists of three specialized filters to reduce the symptoms associated with various organic compounds including formaldehyde. It also has the ability to reduce unpleasant odors creating a more comfortable environment.

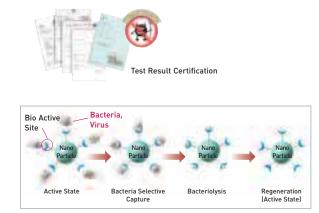


#### 4. Nano Bio Fusion Filter

Nano bio fusion filters allow their nanosize bio enzymes to directly penetrate through cell walls of some bacteria and allergen to decompose its cell nuclei.

#### 5. Plasma Filter

The PLASMA Air Purifying System developed uniquely by LG not only reduces microscopic contaminants and dust, but also reduces house mites, pollen, and pet fur to reduce allergy and asthma symptoms.



#### Distinctions from Conventional Filters



Nano Bio Fusion Filter

Simply inactivate Destroy bacteria but allow part of them to survive

Conventional

The bio enzyme destroys cell walls and nuclei of some bacteria and allergens.

# MULTI V. PLUS











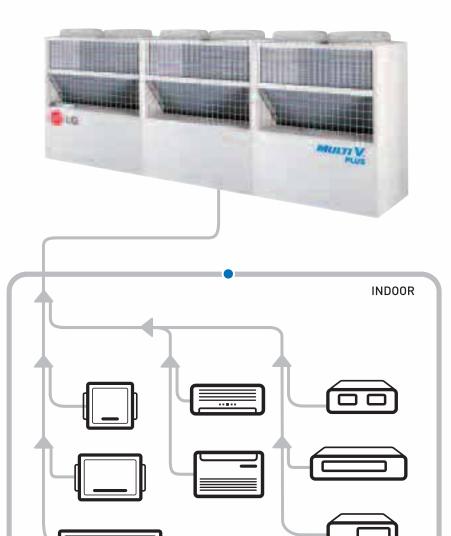
#### Applications

- Hotel School Office Factory

# What is **MULTI V**, PLUS

**MULTI** V PLUS is a two pipe heat pump system, which is available from 5Hp (single module) up to 40Hp (combination multiple outdoor units together). Up to 40 indoor units can be connected to one system, reducing installation material cost, and installation time. Combined with the many control options on offer, the **MULTI** V PLUS system can offer a total building solution.

Condit



MULTI V. PLUS

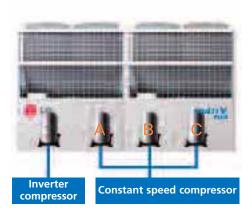
PLUS

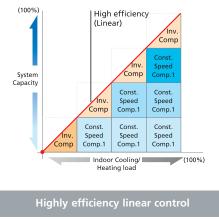
# **Installation Space**

User satisfaction is further increased with **MULTI V. PLUS**, by reducing the installation area through efficient utilisation of space assisted by the design of the outdoor unit.

#### High efficiency linear control

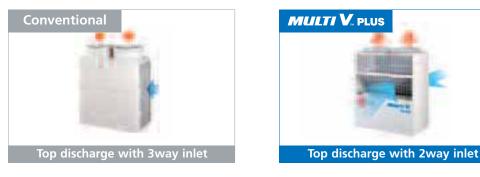
**MULTI** V PLUS allows capacity control in the range of 10-130% according to the indoor units load requirement. This is carried out by applying the optimised control algorithm using the inverter and constant speed compressors as the load increases/decreases. Combined with the outdoor unit inverter fan motors, this highly efficient inverter system also offers low noise operation, outstanding load response (quick and comfortable cooling and heating), and excellent energy reduction.





#### Outstanding installation space utilisation

The two way air induction (front and rear), and top discharge structure, allows **MULTI V.** outdoor units to be placed directly next to each other - offering reduced installation space, and reduced system footprint.



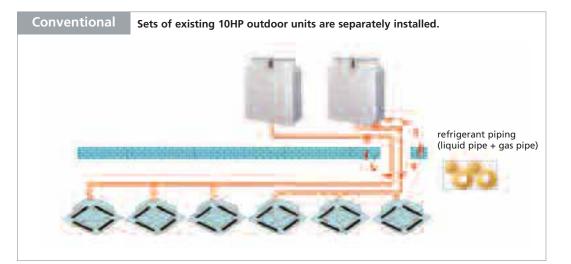
Installation of multiple outdoor units in this way can reduce installation by up to 30% compared to equivalent systems on the market (some of which use the 3 way air induction and top discharge method).

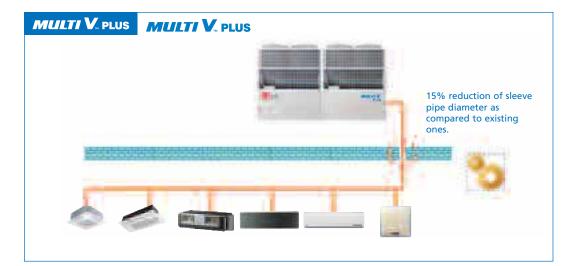
# Economy

**MULTI V. PLUS** ensures an economic life due to its high efficiency operation, reduced installation material usage, and therefore reduced installation cost.

#### Long and reduced field piping for flexible installation

**MULTI V.** gives you the ability to connect multiple outdoor units together to form one system (therefore one set of pipes entering the building). This coupled with the long field piping runs makes the **MULTI V.** system not only very flexible in the type of buildings where it can be installed, but can reduce installation costs and even reduce installation space (especially within the risers).



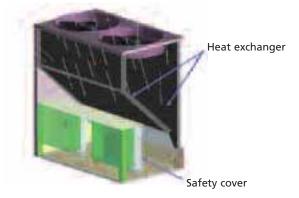




#### Components fully protected from the elements

- 1. Electrical and mechanical parts are totally sealed in their enclosures.
- 2. Separated equipment space between compressors/control boxes, and heat exchangers.
- Because the electrical and mechanical parts are sealed in their own enclosures, this makes them much more resistant to environment factors which can cause corrosion (such as dust and rain) - thus improving the lifetime of the outdoor unit.





#### Alternate compressor cycling / back-up function

1. Duty-cycling function

**MULTI V PLUS** alternates several compressors conditionally to elongate product life span.

#### to meet diverse load in operation

- 1. inverter + constant speed 2 inverter only
- 2. inverter + constant speed 3 inverter only
- 3. inverter + constant speed 1 inverter only

#### 2. Back-up function

**MULTI V. PLUS** can accommodate back up compressor operation when one compressor fails to raise product reliability.

to back up when constant speed compressor 2 is out of order

1. inverter + constant speed 2 (out of order)

2. inverter + constant speed 1 (back up operation)



MULTI compressor system with longer life cycle for each compressor due to alternate operation

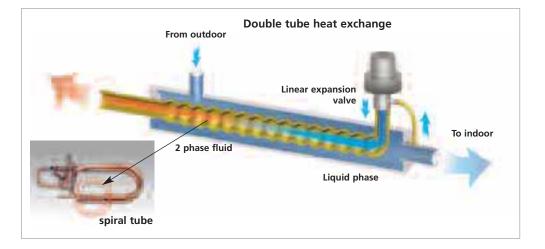


Alternative compressor starts to run

# Outdoor unit

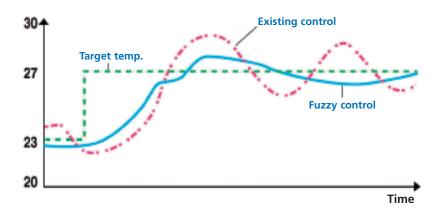
## Subcooling circuit technology

The double tube heat exchanger (LG patent) improves heating and cooling capacity due to the advanced subcooling circuit.



#### Fuzzy control system

The fuzzy control system enables optimum conditioning by quickly attaining and maintaining the desired temperature for a much more pleasant and comfortable environment.

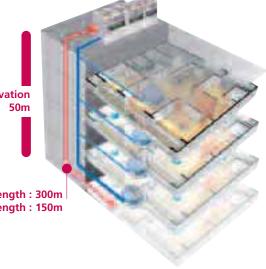




## Longer piping, higher elevation

Reliability tests have proved that installations with piping length of 150m and elevation up to 50m are possible.

elevation 50m

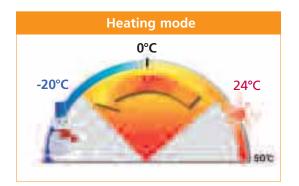


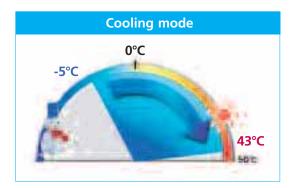
total piping length : 300m actual longest piping length : 150m

## Wide operation range

#### Wide operation range

- Cooling mode : -5°C DB 43°C DB Heating mode : -20°C WB 24°C WB \_
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# Convenience

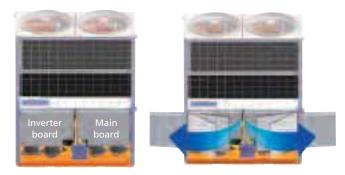
From installation to maintenance and service, **MULTI V. PLUS** adds convenience to cutting-edge technology.

#### Flexible pipe installation in 3 directions



# Convenient swing doors/electrical component enclosures

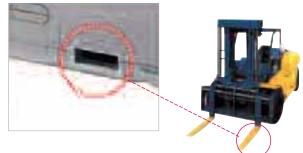
The swing door design (using the electrical component enclosures) enables easy access to compressors and piping for service and maintenance purposes.



## **MULTI V PLUS** is easy to load,

#### un-load and move around

Sections cut into the base of the unit, for fork lift or pallet truck access. Enables easy loading for transportation, and easy moving when the unit is being installed/positioned.



Outdoor unit



## Heat pump

+ Outdoor	Unit						
HP			5	8	10	12	
Model		Combination Unit	ARUN508T1	ARUN808T1 ARUN808T1	ARUN1008T1 ARUN1008T1	ARUN1208T ARUN1208T	
		Independent Unit	ARUN508T1				
Constitut	Casting				20.0		
Capacity	Cooling	kW	14.0	22.4	28.0	33.6	
		kcal/h	12,000	19,300	24,100	28,900	
		Btu/h	47,800	76,400	95,900	114,700	
	Heating	kW	15.8	25.2	31.5	37.8	
		kcal/h	13,600	21,700	27,100	32,500	
		Btu/h	53,900	86,000	107,500	129,000	
Power Input		kW	4.5	6.8	8.5	10.6	
	Heating	kW	4.2	6.4	8.1	9.7	
СОР	Cooling		3.11	3.29	3.29	3.17	
	Heating		3.76	3.94	3.89	3.90	
Power Supply Ø / V / Hz			3/380~415/50				
Dimensions (	W*H*D)	mm	806*1607*730	1280*1607*730	1280*1607*730	1280*1607*73	
Weight kg		150	300	300	300		
Color			Warm Gray				
Sound pressu	re levels	dB(A)±3	56	58	58	58	
Fan	Туре		Propeller Fan				
	Air flow rate	[CMM]	105	190	190	190	
Compressor	Туре		Scroll				
	Number of compressors		1	2	2	2	
Heat Exchang	ger			Gold Fin			
Refrigerant	Туре		R410A				
	Charge kg		4	8	8	8	
	Control		Electronic Expansion Valve				
Refrigerant oil	Туре			FVC68	BD(PVE)		
	Charge	l	2.3	5.6	5.6	5.6	
Piping	Liquid (Flare)	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)	12.7(1/2)	
connections	Gas (Brazing)	mm(inch)	15.88(5/8)	19.05(3/4)	22.2(7/8)	28.58(1 1/8)	
Number of o			1	1	1	1	
Number of m	aximum connecta	able indoor units	6	13	16	20	
Ratio of the o	connectable indo	or units		50~130%	I	I	
	ng length / Elevat		150m / 50m				

Heating-Indoor temp. 20'C[68'F]DB / 15'C[59'F]WB Outdoor temp. 7'C[44.6'F]DB / 6'C[42.8'F]WB Interconnecting Piping Length 7.5m Level Difference of Zero

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Conversion Formula kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m³/min x 35.3

 Notes :
 1. Capacities are based on the following conditions

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 Cooling-Indoor temp. 27 (280 &F1D8 / 19 C(66.2F1WB Outdoor temp. 32 (21957B) 2 / 42 (75.2F1WB Interconnecting Piping Length 7.5m
 Outdoor temp. 37 (24.6 Interconnecting Piping Length 7.5m

 1. Level Difference of Zero
 Level Difference of Zero

 2. Capacities are net capacities
 Level Difference of Zero

 3. Due to our policy of innovation some specifications may be changed without notification

 4. L.E.V.-Linear Expansion Valve

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НР			14	16	18	20	22	
Model Combination Unit Independent Unit		ARUN1408T1 ARUN1408T1	ARUN1608T1 ARUN808T1	ARUN1808T1 ARUN1008T1	ARUN2008T1 ARUN1008T1	ARUN2208T		
				ARUH808T1	ARUH808T1	ARUH1008T1	ARUH1008T	
Capacity	Cooling	kW	39.2	44.8	50.4	56.0	61.6	
	_	kcal/h	33,700	38,500	43,300	48,200	53,000	
		Btu/h	133,800	152,900	172,000	191,100	210,200	
	Heating	kW	44.1	50.4	56.7	63.0	69.3	
	_	kcal/h	37,900	43,300	48,800	54,200	59,600	
		Btu/h	150,500	172,000	193,500	225,000	236,500	
Power Input	Cooling	kW	12.8	13.6	15.3	17.0	19.1	
	Heating	kW	11.5	12.8	14.5	16.2	17.8	
СОР	Cooling		3.06	3.29	3.29	3.29	3.23	
	Heating		3.83	3.94	3.91	3.89	3.89	
Power Supply Ø/V/Hz			3/380~415/50					
Dimensions (	Dimensions (W*H*D) mm		1280*1607*730	2560*1607*730	2560*1607*730	2560*1607*730	2560*1607*730	
Weight	. , ,		300	300*2	300*2	300*2	300*2	
Color			Warm Gray					
Sound pressu	ire levels	$dB(A) \pm 3$	58	60	60	61	61	
Fan	Туре		Propeller Fan					
	Air flow rate	[CMM]	190	380	380	380	380	
Compressor	Туре		Scroll					
	Number of compressors		2	4	4	4	4	
Heat Exchang	ger				Gold Fin	1		
Refrigerant	Туре							
-	Charge		8	16	16	16	16	
	Control			Ele	ectronic Expansion Va	lve		
Refrigerant oil	Туре		FVC68D(PVE)					
5	Charge	l	5.6	5.6+5.6	5.6+5.6	5.6+5.6	5.6+5.6	
Piping	Liquid (Flare)	mm(inch)	12.7(1/2)	12.7(1/2)	15.88(5/8)	15.88(5/8)	15.88(5/8)	
connections	Gas (Brazing)	mm(inch)	28.58(1 1/8)	28.58(1 1/8)	28.58(1 1/8)	28.58(1 1/8)	28.58(1 1/8)	
Number of o			1	2	2	2	2	
Number of m	aximum connecta	able indoor units	20	20	20	20	22	
Ratio of the connectable indoor units			50~130%					

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Conversion Formula kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m<sup>3</sup>/min x 35.3

 Notes :

 1. Capacities are based on the following conditions Cooling-indoor temp. 27 °C[80.6\*F]D8 / 19°C[66.2\*F]WB Outdoor temp. 35°C[95\*F]D8 / 24°C[75.2\*F]WB Interconnecting Piping Length 7.5m
 Heating-Indoor temp. 20°C[68"F]DB / 15°C[59"F]WB Outdoor temp. 7°C[44.6\*F]D8 / 6°C[42.8\*F]WB Interconnecting Piping Length 7.5m

 2. Capacities are net capacities 3. Due to our policy of innovation some specifications may be changed without notification 4. LE.V. -Linear Expansion Valve
 Soure to our policy of innovation some specifications may be changed without notification

Air conditioning system  $\_$  25



# Heat pump

#### \* Outdoor Unit

HP			24	26	28	30	32		
Model		<b>Combination Unit</b>	ARUN2408T1	ARUN2608T1	ARUN2808T1	ARUN3008T1	ARUN3208T1		
		Independent Unit	ARUN1208T1	ARUN1008T1	ARUN1008T1	ARUN1008T1	ARUN1208T1		
			ARUH1208T1	ARUH808T1	ARUH1008T1	ARUH1008T1	ARUH1008T1		
				ARUH808T1	ARUH808T1	ARUH1008T1	ARUH1008T1		
Capacity	Cooling	kW	67.2	72.8	78.4	84.0	89.6		
		kcal/h	57,800	62,600	67,400	72,200	77,100		
		Btu/h	229,300	248,400	267,500	286,600	305,700		
	Heating	kW	75.6	81.9	88.2	94.5	100.8		
		kcal/h	65,000	70,400	75,900	81,300	86,700		
		Btu/h	258,000	279,500	301,000	322,500	343,900		
Power Input	Cooling	kW	21.2	22.1	23.8	25.5	27.6		
	Heating	kW	19.4	20.9	22.6	24.3	25.9		
COP	Cooling	1	3.17	3.29	3.29	3.29	3.25		
	Heating		3.90	3.92	3.90	3.89	3.89		
Power Supply Ø / V / Hz		3/380~415/50							
Dimensions (	Dimensions (W*H*D) mm		2560*1607*730	3840*1607*730	3840*1607*730	3840*1607*730	3840*1607*730		
Weight		kg	300*2	300*3	300*3	300*3	300*3		
Color		1		·	Warm Gray		·		
Sound pressu	ire levels	dB(A)±3	61	62	62	63	63		
Fan	Туре	Туре		Propeller Fan					
	Air flow rate [CMM]		380	570	570	570	570		
Compressor	Туре		Scroll						
	Number of compressors		4	6	6	6	6		
Heat Exchang	ger				Gold Fin				
Refrigerant	Туре		R410A						
	Charge		16	24	24	24	24		
	Control		Electronic Expansion Valve						
Refrigerant oil	Туре		FVC68D(PVE)						
	Charge l		5.6+5.6	5.6+5.6+5.6	5.6+5.6+5.6	5.6+5.6+5.6	5.6+5.6+5.6		
Piping	Liquid (Flare)	mm(inch)	15.88(5/8)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)		
connections	Gas (Brazing)	mm(inch)	34.9(1 3/8)	34.9(1 3/8)	34.9(1 3/8)	34.9(1 3/8)	34.9(1 3/8)		
Number of o	utdoor units		2	3	3	3	3		
Number of m	aximum connect	able indoor units	24	32	32	32	32		
Ratio of the o	connectable indo	or units			50~130%				
Longest pipir	ng length / Elevat	ion	150m / 50m						

 
 Notes :

 1. Capacities are based on the following conditions Cooling-Indoor temp. 27 C[80.6"F]D8 / 19'C[66.2"F]W8 Outdoor temp. 35'C[95'F]D8 / 24'C[75.2"F]W8 Interconnecting Piping Length 7.5m Level Difference of Zero
 Heating-Indoor temp. 20'C[68'F]I Utdoor temp. 7'C[44.6" Interconnecting Piping Length 7.5m

 2. Capacities are net capacities 3. Due to our policy of innovation some specifications may be changed without notification 4. LE.V. -Linear Expansion Valve
 Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB Outdoor temp. 7°C[44,6°F]DB / 6°C[42,8°F]WB Interconnecting Piping Length 7.5m Level Difference of Zero

Conversion Formula kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m³/min x 35.3







#### \* Outdoor Unit

HP			34	36	38	40		
Model		Combination Unit	ARUN3408T1	ARUN3608T1	ARUN3808T1	ARUN4008T1		
	Independent Unit		ARUN1208T1	ARUN1208T1	ARUN1408T1	ARUN1408T1		
			ARUH1208T1	ARUH1208T1	ARUH1208T1	ARUH1408T1		
			ARUH1008T1	ARUH1208T1	ARUH1208T1	ARUH1208T1		
Capacity	Cooling	kW	95.2	100.8	106.4	112.0		
		kcal/h	81,900	86,700	91,500	96,300		
		Btu/h	324,800	343,900	363,100	382,200		
	Heating	kW	107.1	113.4	119.7	126.0		
		kcal/h	92,100	97,500	102,900	108,400		
		Btu/h	365,400	386,900	408,400	429,900		
Power Input	Cooling	kW	29.7	31.8	34.0	36.2		
	Heating	kW	27.5	29.1	30.9	32.7		
COP	Cooling		3.21	3.17	3.13	3.09		
	Heating		3.89	3.89 3.90		3.85		
Power Supply	,	Ø / V / Hz	3/380~415/50					
Dimensions (W*H*D) mm		3840*1607*730	3840*1607*730	3840*1607*730	3840*1607*730			
Neight		kg	300*3	300*3	300*3	300*3		
Color			Warm Gray					
Sound pressu	re levels	dB(A)±3	63	63	63	63		
Fan	Туре	Туре		Propeller Fan				
	Air flow rate	[CMM]	570	570	570	570		
Compressor	Туре			Sc	roll			
	Number of compressors		6	6	6	6		
Heat Exchang	jer		Gold Fin					
Refrigerant	Туре			R4	10A			
	Charge		24	24	24	24		
	Control		Electronic Expansion Valve					
Refrigerant oil	Туре		FVC68D(PVE)					
	Charge	l	5.6+5.6+5.6	5.6+5.6+5.6	5.6+5.6+5.6	5.6+5.6+5.6		
Piping	Liquid (Flare)	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)		
connections	Gas (Brazing)	mm(inch)	34.9(1 3/8)	41.3(1 5/8)	41.3(1 5/8)	41.3(1 5/8)		
Number of o	utdoor units		3	3	3	3		
Number of m	aximum connect	able indoor units	34	36	38	40		
Ratio of the o	onnectable indo	or units		50~	130%			
ongest pipir	ig length / Elevat	ion		150m	ו / 50m			

 $\oplus$ 

 Notes :
 I. Capacities are based on the following conditions

 Cooling-Indoor temp. .20°C[68"F]D8 / 19°C[66.27F]WB
 Heating-Indoor temp. .20°C[68"F]D8 / 15°C[59"F]WB

 Outdoor temp. .20°C[68.7F]D8 / 19°C[66.27F]WB
 Outdoor temp. .20°C[68"F]D8 / 15°C[59"F]WB

 Outdoor temp. .20°C[68.7F]D8 / 19°C[66.27F]WB
 Outdoor temp. .20°C[68"F]D8 / 15°C[59"F]WB

 Outdoor temp. .20°C[68"F]D8 / 15°C[59"F]WB
 Outdoor temp. .20°C[68"F]D8 / 15°C[59"F]WB

 Level Difference of Zero
 Level Difference of Zero

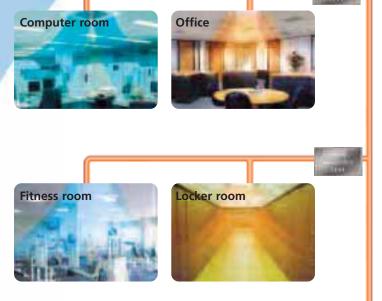
 2. Capacities are net capacities
 Level Difference of Zero

 3. Due to our policy of innovation some specifications may be changed without notification
 Level Difference of Zero

Conversion Formula kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m³/min x 35.3

# MULTI V. SYNC





#### **Applications**

- Machine room / computer room, office Fitness room, locker room Kitchen, restaurant

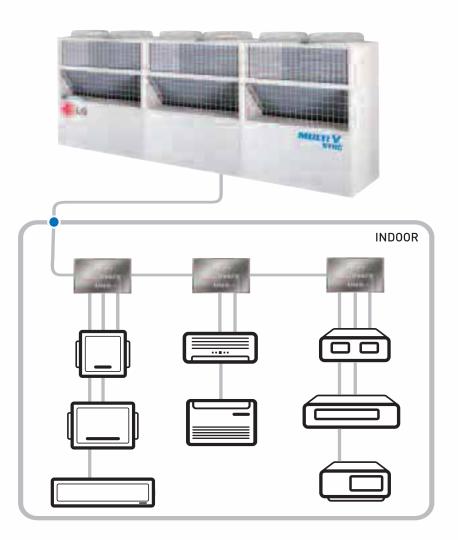
- According to customer's need, heating & cooling may be required simultaneously. (hotel, office, etc.)



# R 410A

# What is **MULTI V** SYNC

**MULTI V.** sync is a three pipe heat recovery system, which means simultaneous cooling and heating is possible from one system. This is achieved using the three pipes from the outdoor unit in conjunction with heat recovery boxes. The heat recovery boxes (or HR boxes) are installed between the outdoor unit and indoor units, and the refrigerant is distributed to the indoor units in its required state (depending on whether or not cooling or heating is required). Heat that is removed from one room can be used elsewhere within the system where it is required, thus making the **MULTI V.** sync even more efficient. The **MULTI V.** sync is available from 8Hp (single module) up to 40Hp (combining multiple outdoor units together). Up to 40 indoor units can be connected to one system, reducing installation material cost, and installation time. Combined with the many control options on offer, the **MULTI V.** sync system can offer a total building solution.



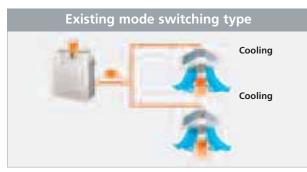
MULTI V. SYNC

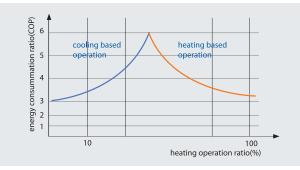
SYNC

# Technology

Simultaneous heating and cooling with one outdoor unit - **MULTI V. SYNC** Your environment is ensured of optimum conditions regardless of season or space.

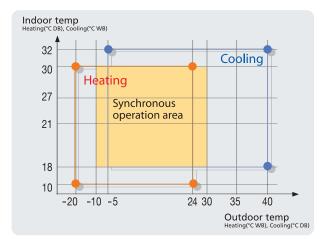
## Technology





Outdoor temperature: 7°C DB / 6°C WB
 Indoor temperature : 20°C DB / 15°C WB

#### Wide operation range



#### Wide operation range

- Cooling mode: -5°C WB to 43°C WB
- Heating mode: -20°C DB to 24°C DB
- Synchronous mode: -10°C DB to 30°C DB



#### Heating based operation

: Many indoor units run in heating mode, a few run in cooling mode

#### **Cooling based operation**

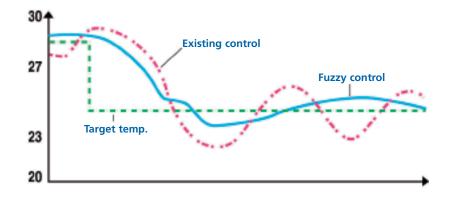
: Many indoor units run in cooling mode, a few run in heating mode

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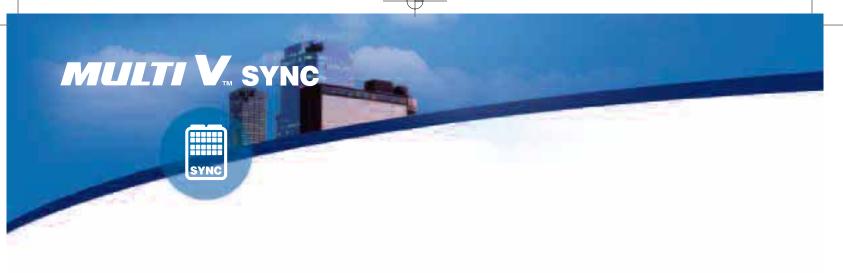
## Outdoor unit

## Fuzzy control system

The fuzzy control system enables optimum conditioning by quickly attaining and maintaining the desired temperature for a much more pleasant and comportable environment.

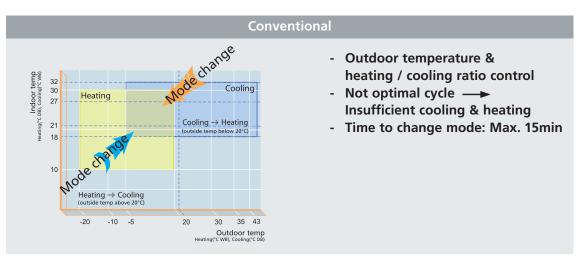


In a system that has non-linear characteristics, Fuzzy is a very effective control logic that quantifies a vague situation or condition.

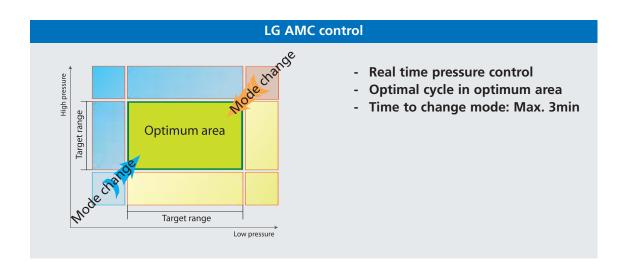


#### AMC (Advanced Mode Change) control

AMC control provides an optimal operation under any conditions.



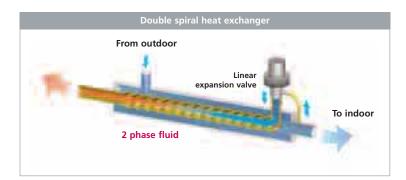




# Outdoor unit

## High efficiency heat recovery unit

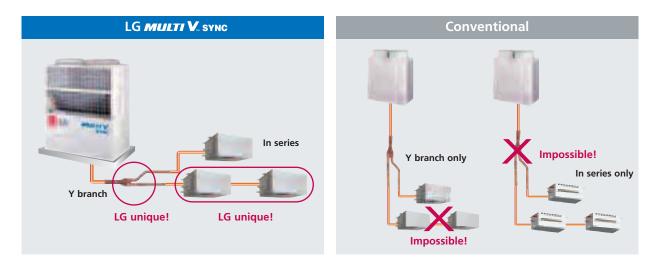
- Max. 4 indoor units can be connected by module design.
- Due to the automatic search algorithm for piping detection, easy installation and effectiveness is improved.
- Subcooling cycle in HR unit results in the system running of maximum effiency.





#### Flexible connection of HR unit

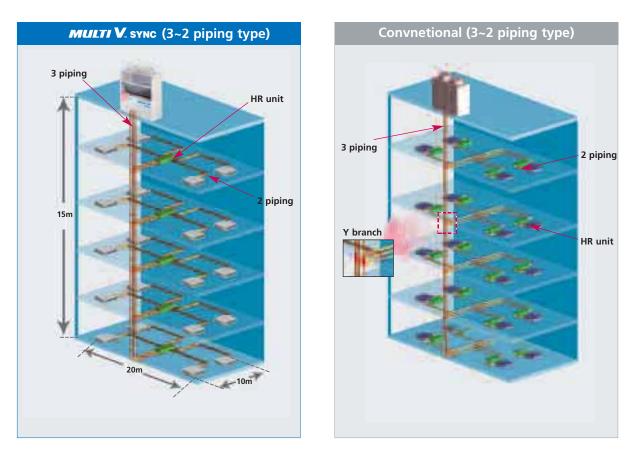
LG's heat recovery unit allows flexible connection both in series and in a row.





#### Reduced number of HR boxes required for same number of indoor units

The heat recovery box makes economical and convenient installation possible - less piping, and less units to install.



#### LG needs less installation cost than the conventional

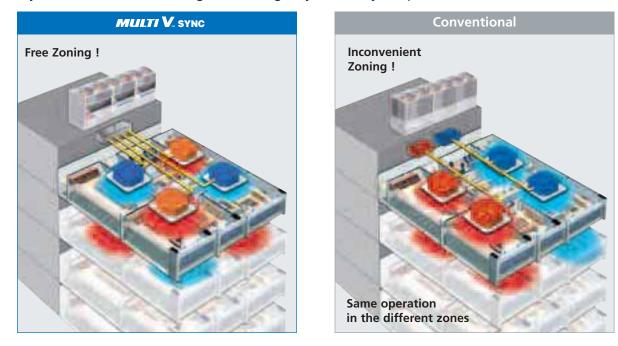
	LG	Conventional
Y branch	12 unit	57 unit
HR unit	5 unit	20 unit
Total piping lenght	690 m	840 m

\* Assumed with 5 stories building

# Outdoor unit

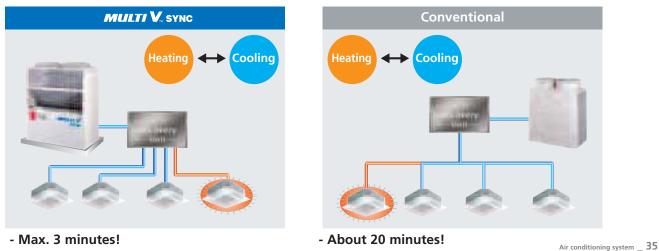
#### Zoning after building alterations

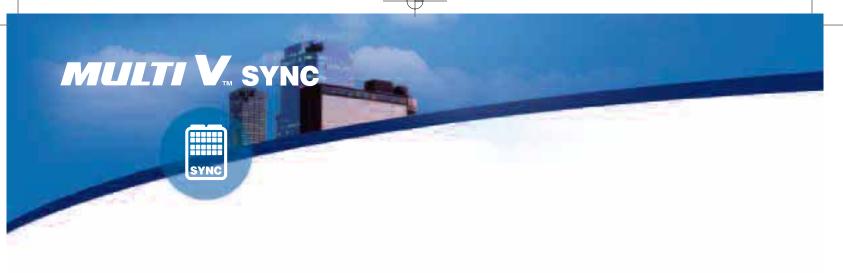
Because each indoor unit has the ability to change mode whenever it chooses to do so, if the building layout changes (more partitions are installed), the indoor units will control individually as before. With conventional systems (designed only to the previous building layout), simultaneous heating and cooling may not always be possible.



## Fast mode change response

When the operating mode of an indoor unit is changed (i.e. from cooling to heating or visa versa), the response time of the mode change is fast compared to conventional systems. Not only is it fast for the room concerned, but also there is little or no capacity loss for all other units on the system. Therefore mode changes can happen comfortably and quickly for the entire system, regardless of seasonal conditions.





#### Applications

Some environments such as a computer room, mechanical room, hospital, restaurant, fitness centre, and sauna require cooling and heating at the same time.

Computer / mechanical room - because of excessive heat from the equipment, the computer and mechanical rooms need cooling even during the winter time.

Fitness centre - the exercise area may need different cooling or heating from the dressing room or rest area.

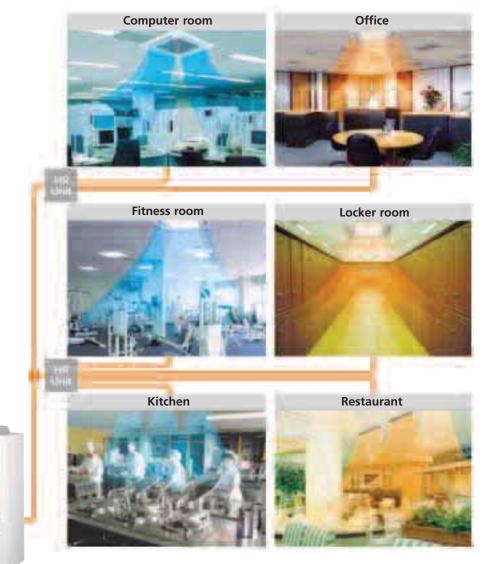
Restaurant - because of heat from the cooking equipment, the kitchen may need cooling even during the winter time.



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### Outdoor unit





- Machine room / computer room, office
- Fitness room, locker room
- Kitchen, restaurant
- According to customer's need, heating & cooling may be required simultaneously. (hotel, office, etc.)



### Heat recovery

			8	10	12	14	16	
Model		Combination Unit Independent Unit	ARUB808T1 ARUB808T1	ARUB1008T1 ARUB1008T1	ARUB1208T1 ARUB1208T1	ARUB1408T1 ARUB1408T1	ARUB1608T1 ARUB808T1 ARUS808T1	
Capacity	Cooling	kW	22.4	28.0	22.6	20.2	44.8	
Capacity	cooling	kcal/h	22.4 19,300	28.0	33.6 28,900	39.2 33,700	44.8 38,500	
		Btu/h	76,400	95,900	114,700	133,800	152,900	
	Heating	kW	25.2	31.5	37.8	44.1	50.4	
	licating	kcal/h	21,700	27,100	32,500	37,900	43,300	
		Btu/h	·····	107,500	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	43,300	
Power Input	Cooling	kW	86,000	8.5	129,000	150,500	13.6	
rower input	Heating	kW	6.8		10.6 9.7	12.8		
СОР	Cooling	K V V	6.4	8.1		11.5	12.8	
COP	<u>_</u>		3.29	3.29	3.17	3.06	3.29	
Power Supply	Heating	Ø DVUU-	3.94	3.89	3.90 3/380~415/50	3.83	3.94	
Dimensions (		Ø/V/Hz		12001110071220			2222142224	
	W^H^D)	mm	1280*1607*730 300	1280*1607*730	1280*1607*730	1280*1607*730	2560*1607*730	
	Weight kg			300	300	300	300*2	
Color					Warm Gray	1		
Sound pressu		dB(A)±3	58	58	58	58	60	
Fan	Туре	· · · · · · · · · · · · · · · · · · ·			Propeller Fan	Г	т	
-	Air flow rate	[CMM]	190	190	190	190	380	
Compressor	Туре			1	Scroll	ſ	1	
	Number of comp	oressors	2	2	2	2	4	
Heat Exchang			Gold Fin					
Refrigerant	Туре				R410A	r		
	Charge	kg	8	8	8	8	16	
	Control		Electronic Expansion Valve					
Refrigerant oil	Туре			1	FVC68D(PVE)			
	Charge	l	5.6	5.6	5.6	5.6	5.6+5.6	
Piping	Liquid (Flare)	mm(inch)	9.52(3/8)	9.52(3/8)	12.7(1/2)	12.7(1/2)	12.7(1/2)	
connections	Gas (Brazing)	mm(inch)	19.05(3/4)	22.2(7/8)	28.58(1 1/8)	28.58(1 1/8)	28.58(1 1/8)	
	Discharge Gas (Brazin	g) mm(inch)	15.88(5/8)	19.05(3/4)	19.05(3/4)	22.2(7/8)	22.2(7/8)	
Number of o	utdoor units		1	1	1	1	2	
Number of m	aximum connecta	able indoor units	13	16	20	20	20	
	connectable indoc				50~130%			

Notes :

Heating-Indoor temp, 20'C[68'F]DB / 15'C[59'F]WB Outdoor temp, 7'C[44.6'F]DB / 6'C[42.8'F]WB Interconnecting Piping Length 7.5m Level Difference of Zero

Conversion Formula kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m³/min x 35.3

 Notes :

 1. Capacities are based on the following conditions Cooling-Indoor temp. 27'C[80.6'F]DB / 19'C[66.2'F]WB Outdoor temp. 35'C[95'F]DB / 24'C[75.2'F]WB Interconnecting Piping Length 7.5m Level Difference of Zero
 Heating-Indoor temp. 20'C[68'F]I

 2. Capacities are net capacities 3. Due to our policy of innovation some specifications may be changed without notification 4. LE.V.-Linear Expansion Valve
 Heating-Indoor temp. 20'C[68'F]I

38 \_ Air conditioning system

### Outdoor unit







#### \* Outdoor Unit

HP			18	20	22	24	26	
Model		Combination Unit	ARUB1808T1	ARUB2008T1	ARUB2208T1	ARUB2408T1	ARUB2608T1	
		Independent Unit	ARUB1008T1	ARUB1008T1	ARUB1208T1	ARUB1208T1	ARUB1008T1	
			ARUS808T1	ARUS1008T1	ARUS1008T1	ARUS1208T1	ARUS808T1	
							ARUS808T1	
Capacity	Cooling	kW	50.4	56.0	61.6	67.2	72.8	
		kcal/h	43,300	48,200	53,000	57,800	62,600	
		Btu/h	172,000	191,100	210,200	229,300	248,400	
	Heating	kW	56.7	63.0	69.3	75.6	81.9	
		Kcal/h	48,800	54,200	59.600	65,000	70,400	
		Btu/h	193,500	225,000	236.500	258,000	279,500	
Power Input	Cooling	kW	15.3	17.0	19.1	21.2	22.1	
	Heating	kW	14.5	16.2	17.8	19.4	20.9	
COP	Cooling	1	3.29	3.29	3.23	3.17	3.29	
	Heating		3.91	3.89	3.89	3.90	3.92	
Power Supply	y	Ø / V / Hz	3/380~415/50					
Dimensions (	Dimensions (W*H*D) mm		2560*1607*730	2560*1607*730	2560*1607*730	2560*1607*730	3840*1607*730	
Weight		kg	300*2	300*2	300*2	300*2	300*3	
Color			Warm Gray					
Sound pressu	ire levels	$dB(A) \pm 3$	60	61	61	61	62	
Fan	Туре		Propeller Fan					
	Air flow rate	[CMM]	380	380	380	380	570	
Compressor	Туре		Scroll					
	Number of cor	npressors	4	4	4	4	6	
Heat Exchang	ger		Gold Fin					
Refrigerant	Туре				R410A			
	Charge	Kg	16	16	16	16	24	
	Control		Electronic Expansion Valve					
Refrigerant oil	Туре				FVC68D(PVE)			
	Charge	l	5.6+5.6	5.6+5.6	5.6+5.6	5.6+5.6	5.6+5.6+5.6	
Piping	Liquid (Flare)	mm(inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)	19.05(3/4)	
connections	Gas (Brazing)	mm(inch)	28.58(1 1/8)	28.58(1 1/8)	34.9(1 3/8)	34.9(1 3/8)	34.9(1 3/8)	
	Discharge Gas (Braz	Discharge Gas (Brazing) mm(inch)		22.2(7/8)	28.58(1 1/8)	28.58(1 1/8)	28.58(1 1/8)	
Number of o	utdoor units		2	2	2	2	3	
Number of m	naximum connec	table indoor units	20	20	22	24	32	
Ratio of the	connectable ind	oor units			50~130%			
Longest pipir	ng length / Eleva	ition			150m / 50m			

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 Notes :
 I. Capacities are based on the following conditions.

 Cooling-Indoor temp. 27°C[80.6°F]D8 / 19°C[66.2°F]WB
 Heating-Indoor temp. 20°C[68°F]D8 / 15°C[59°F]WB

 Outdoor temp. 35°C[35°F]D8 / 24°C[75.2°F]WB
 Outdoor temp. 7°C[44.6°F]D8 / 15°C[59°F]WB

 Interconnecting Piping Length 7.5m
 Interconnecting Piping Length 7.5m

 Level Difference of Zero
 Level Difference of Zero

 3. Due to our policy of innovation some specifications may be changed without notification
 Le.V. -Linear Expansion Valve

Conversion Formula



### Heat recovery

#### \* Outdoor Unit

НР			28	30	32	34	36	
Model		<b>Combination Unit</b>	ARUB2808T1	ARUB3008T1	ARUB3208T1	ARUB3408T1	ARUB3608T1	
		Independent Unit	ARUB1008T1	ARUB1008T1	ARUB1208T1	ARUB1208T1	ARUB1208T1	
			ARUS1008T1	ARUS1008T1	ARUS1008T1	ARUS1208T1	ARUS1208T1	
			ARUS808T1	ARUS1008T1	ARUS1008T1	ARUS1008T1	ARUS1208T1	
Capacity	Cooling	kW	78.4	84.0	89.6	95.2	100.8	
		kcal/h	67,400	72,200	77,100	81,900	86,700	
		Btu/h	267,500	286,600	305,700	324,800	343,900	
	Heating	kW	88.2	94.5	100.8	107.1	113.4	
		kcal/h	75,900	81,300	86.700	92,100	97,500	
		Btu/h	301,000	322,500	343,900	365,400	386,900	
Power Input	Cooling	kW	23.8	25.5	27.6	29.7	31.8	
	Heating	kW	22.6	24.3	25.9	27.5	29.1	
COP	Cooling	-	3.29	3.29	3.25	3.21	3.17	
	Heating		3.90	3.89	3.89	3.89	3.90	
Power Supply	1	Ø / V / Hz	3/380~415/50					
Dimensions (	W*H*D)	mm	3840*1607*730	3840*1607*730	3840*1607*730	3840*1607*730	3840*1607*730	
Weight kg		300*3	300*3	300*3	300*3	300*3		
Color				·	Warm Gray	·		
Sound pressu	re levels	dB(A)±3	62	63	63	63	63	
Fan	Туре				Propeller Fan			
	Air flow rate	[CMM]	570	570	570	570	570	
Compressor	Туре				Scroll			
	Number of com	pressors	6	6	6	6	6	
Heat Exchang	jer			1	Gold Fin	1	1	
Refrigerant	Туре		R410A					
	Charge	kg	24	24	24	24	24	
	Control		Electronic Expansion Valve					
Refrigerant oil	Туре		FVC68D(PVE)					
	Charge	l	5.6+5.6+5.6	5.6+5.6+5.6	5.6+5.6+5.6	5.6+5.6+5.6	5.6+5.6+5.6	
Piping	Liquid (Flare)	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	
connections	Gas (Brazing)	mm(inch)	34.9(1 3/8)	34.9(1 3/8)	34.9(1 3/8)	34.9(1 3/8)	41.3(1 5/8)	
	Discharge Gas (Brazing) mm(inch)		28.58(1 1/8)	28.58(1 1/8)	28.58(1 1/8)	28.58(1 1/8)	28.58(1 1/8)	
Number of o	utdoor units		3	3	3	3	3	
Number of m	aximum connecta	able indoor units	32	32	32	34	36	
Ratio of the o	onnectable indo	or units			50~130%			
Longest pipir	ng length / Elevati	ion			150m / 50m			

 Notes :

 1. Capacities are based on the following conditions

 Cooling-Indoor temp. 27 C[80.67 F]D8 / 19 C[66.27 F]WB

 Outdoor temp. 35 C[95 F]D8 / 24 C[75.27 F]WB

 Outdoor temp. 75 C[95 F]D8 / 24 C[75.27 F]WB

 Outdoor temp. 75 C[95 F]D8 / 24 C[75.27 F]WB

 Outdoor temp. 75 C[95 F]D8 / 24 C[75.27 F]WB

 Level Difference of Zero

 2. Capacities are net capacities

 3. Due to our policy of innovation some specifications may be changed without notification

 4. LE.V. -Linear Expansion Valve

kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m³/min x 35.3

### Outdoor unit







#### \* Outdoor Unit

HP			38	40	
Model		Combination Unit	ARUB3808T1	ARUB4008T1	
		Independent Unit	ARUB1408T1	ARUB1408T1	
			ARUS1208T1	ARUS1408T1	
			ARUS1208T1	ARUS1208T1	
Capacity	Cooling	kW	106.4	112.0	
		kcal/h	91,500	96,300	
		Btu/h	363,100	382,200	
	Heating	kW	119.7	126.0	
	-	kcal/h	102,900	108,400	
		Btu/h	408,400	429,900	
Power Input	Cooling	kW	34	36.2	
•	Heating	kW	30.9	32.7	
СОР	Cooling		3.13	3.09	
	Heating		3.87	3.85	
Power Supply	-	Ø/V/Hz	3/380~		
Dimensions (		mm	3840*1607*730	3840*1607*730	
Weight	,,	kg	300*3	300*3	
Color			Warm		
Sound pressu	re levels	dB(A)±3	63	63	
Fan	Туре		Propel		
	Air flow rate	[CMM]	570	570	
Compressor	Туре		Scr		
•	Number of com	pressors	6	6	
Heat Exchance		•	Gold Fin		
Refrigerant	Туре		R410A		
5	Charge kg		24 24		
	Control		Electronic Expansion Valve		
Refrigerant oil	Туре		FVC68	D(PVE)	
-	Charge	l	5.6+5.6+5.6	5.6+5.6+5.6	
Piping	Liquid (Flare)	mm(inch)	19.05(3/4)	19.05(3/4)	
connections	Gas (Brazing)	mm(inch)	41.3(1 5/8)	41.3(1 5/8)	
	Discharge Gas (Brazir	ng) mm(inch)	34.9(1 3/8)	34.9(1 3/8)	
Number of o	utdoor units		3	3	
Number of m	aximum connect	able indoor units	38	40	
Ratio of the o	onnectable indo	or units	50~1	30%	
Longest pipir	ng length / Elevat	ion	150m	/ 50m	
lotes : . Capacities are based Cooling-Indoor tem Outdoor ter Interconnec	on the following conditio p. 27°C[80.6°F]DB / 19°C[66. mp. 35°C[95°F]DB / 24°C[75. ting Piping Length 7.5m ence of Zero	ns 2'F]WB Heating-Indoor temp. 2( 2'F]WB Outdoor temp.	)'C[68'F]DB / 15'C[59'F]WB 7'C[44.6F]DB / 6'C[42.8'F]WB Piping Length 7.5m e of Zero	Conversion Formula kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m³/min x 35.3	

Level Difference of Zero Level Difference of Zero 2. Capacities are net capacities 3. Due to our policy of innovation some specifications may be changed without notification 4. LE.V. -Linear Expansion Valve

# MULTI V. SPACE









#### **Applications**

- Flat
- Premium village
- High rise apartment Office

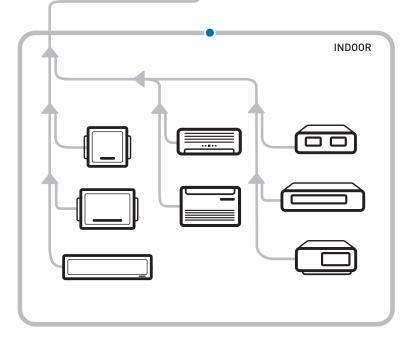
#### **Outdoor unit**

### What is **MULTI V. SPACE**

**MULTI V.** SPACE is a two pipe heat pump system, specifically designed with internal installation in mind. The air induction and air discharge are located on the same side, which is ideal for installing against a louvered wall. **MULTI V.** SPACE is available in 5Hp and 10Hp models, and up to 16 indoor units can be connected to one system. Combined with the many control options on offer, the **MULTI V.** SPACE system can offer a total building solution.









#### **MULTI V. SPACE** has the following differentiating features

- Air induction and dischange is combined on the same side, allowing easy installation to a louvered wall without the need to install expensive and time consuming duct work.
- Powerful sirocco fans discharge the air to the left and right, preventing air short cycling between units installed next to each other and between floors.
- Fully inverter driven for higher efficiency and reduced operation noise.
- Piping can exit the unit from the left or right front panels, depending on installation requirements.
- Because of the design of **MULTI V**. **SPACE**, less area is actually required for the installation of the unit, compared to convential systems installed in the same way.
- The External Static Pressure on the fans can be increased up to 140 pascals if ducting is required to be fitted to the outdoor unit. This is done by carrying out a setting on the main PCB.

### Cutting edge technology and design set a new standard for outdoor units

Unlike existing units which are awkward when matched with internal installation applications (due to ducting configuration and the problems faced with three sided air induction), the **MULTI V. SPACE** design greatly reducess installation area requirement, meaning floor space can be retained for living/working area, rather than wasted as a plant room.



#### Outdoor unit

### Interior



### Various types of indoor unit help create a pleasant interior environment

The ceiling mounted indoor units save space and  $\triangle RT COOL^{M}$  indoor units can be chosen to blend in nicely with existing décor - whether the application is residential or commercial.



MULTI VI SPAC

### **Space Saving**

The design of the **MULTI V. SPACE** means that less area is actually required to install the unit, compared to equivalent typez of system used in this type of application.

#### Retain useable floor space by reducing plant room size

Reduction of the required installation space by up to 50% over conventional systems, means more floor space can be retained as living/working space (depending on application). Or if the plant room size cannot be decreased, the remaining space inside it can be used to install more systems, or other equipment/services. Either way, this system gives floor space back to the end user.





\* based on heat pump 5HP

#### Outdoor unit

### Economy

Cutting edge inverter system technology offers high efficiency and economical operation.

#### **MULTI V. SPACE** is a high efficiency

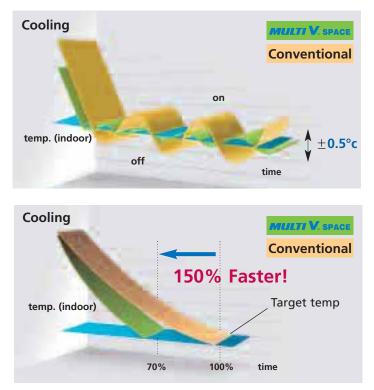
#### inverter system

**MULTI V. SPACE** uses frequency controlled inverter compressor(s) and fan motor(s), to enable capacity control according to the indoor load. **MULTI V. SPACE** has a COP of 3.9 in cooling, and 4.1 in heating.



#### Precise inverter control ensures quick cooling and heating, with minimum temperature deviation

When the outside temperature is relatively stable, the compressor frequency is reduced, (it is not stopped) to ensure comfortable room temperatures. The desired temperature it obtained quickly by increasing the compressor frequency as the indoor unit load requires it to do so.



MULTI

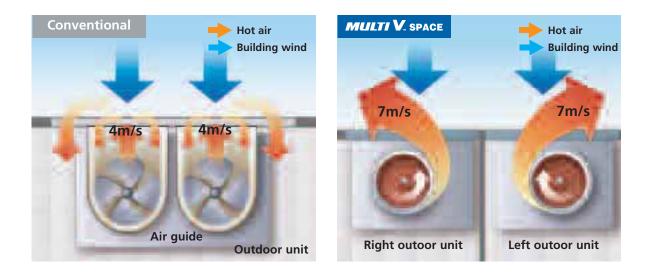
SPA

### Design

**MULTI V. SPACE** has applied frontal induction and discharge method for the first time on a VRF unit, therefore keeping the building interior safe from strong winds associated with high rise buildings.

#### Sirocco fans designed to withstand high building wind speeds

Building wind and reverse wind effect are stronger at higher floor levels, which can cause discharge air to short cycle back to the induction side affecting system control. It can also cause damage to the fans, which in turn will considerably reduce system performance. However, **MULTI V. SPACE** is designed to generate very strong airflow (7m/s or more) to overcome this problem. This makes **MULTI V. SPACE** ideal for use in such high rise applications.



#### No interference from the discharge air between units or between floors

Because of the symmetrical design characteristics of conventional VRF systems, high rise installation is not always recommended (due to heat columns affecting system control on higher floors). **MULTI V. SPACE** solves such installation problems using powerful left and right air discharge fans which throw the air outwards rather than upwards, allowing high rise installation with no control problems on the upper floors.



Sirocco fan

61799 LG Multi V Catalogue 4/5/07 2:18 pm Page 49

#### **Outdoor unit**

### Outdoor unit

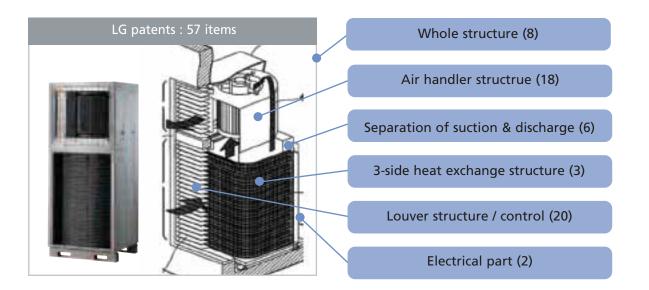
#### If ducting is installed, fan external static pressure can be increased

- Enhanced installation flexibility (doesn't just have to be installed against a louvered wall).
- No need to change the fan motor (jumper settings made on the main PCB).
- No capacity reduction, or increase in noise levels.

	How to	set up E	.S.P (unit:mmAq)	88
	10HP	5HP		
1)	0~3	0~2	000000	Insert connector • Connector (in the bag with installation manual) Insert connector as manual • Housing (in main PCB)
2)	3~6	2~3		Duct application
3)	6~8	3~4		
4)	8~10	4~5		Duct
5)	10~12	5~6	connector connector	
6)	12~14	6~7	connector connector	Discharging

#### LG patent for **MULTI V** SPACE

All technologies in the **MULTI V. SPACE** which make it a distinctive, unique unit has been applied for patents domestically and internationally. And, some of them have already been registered.



MULTI VIII SPAC

### **Comfort & Silence**

When used in residential applications, **MULTI V. SPACE** can eliminate such problems caused by operational noise, vibration, and uncomfortable air drafts from discharge air (i.e. on a balcony).

#### The directional discharge air outlet eliminates hot air drafts

The sealed structure of the **MULTI V. SPACE**, coupled with the frontal air induction and discharge, reduces the need for extra space required for air induction, and eliminates the generation of hot air drafts, ensuring a comfortable environment i.e. for a balcony or decking/patio area.



#### Reduced noise and vibration

The other advantage of the sealed structure of the **MULTI V. SPACE** is drastic noise and vibration reduction. The noise is reduced due to the frontal air discharge design, and the fact that the sealed design reduces 'noise leakage' through the body of the unit. This means that the noise level indoors is very quiet indeed compared with conventional system used in this type of application.



The indoor noise level is maintained at 30~40dBA, as quiet as being in the library.



### Outdoor unit

# Outdoo

**MULTI V. SPACE** 

Outdoor unit specifications

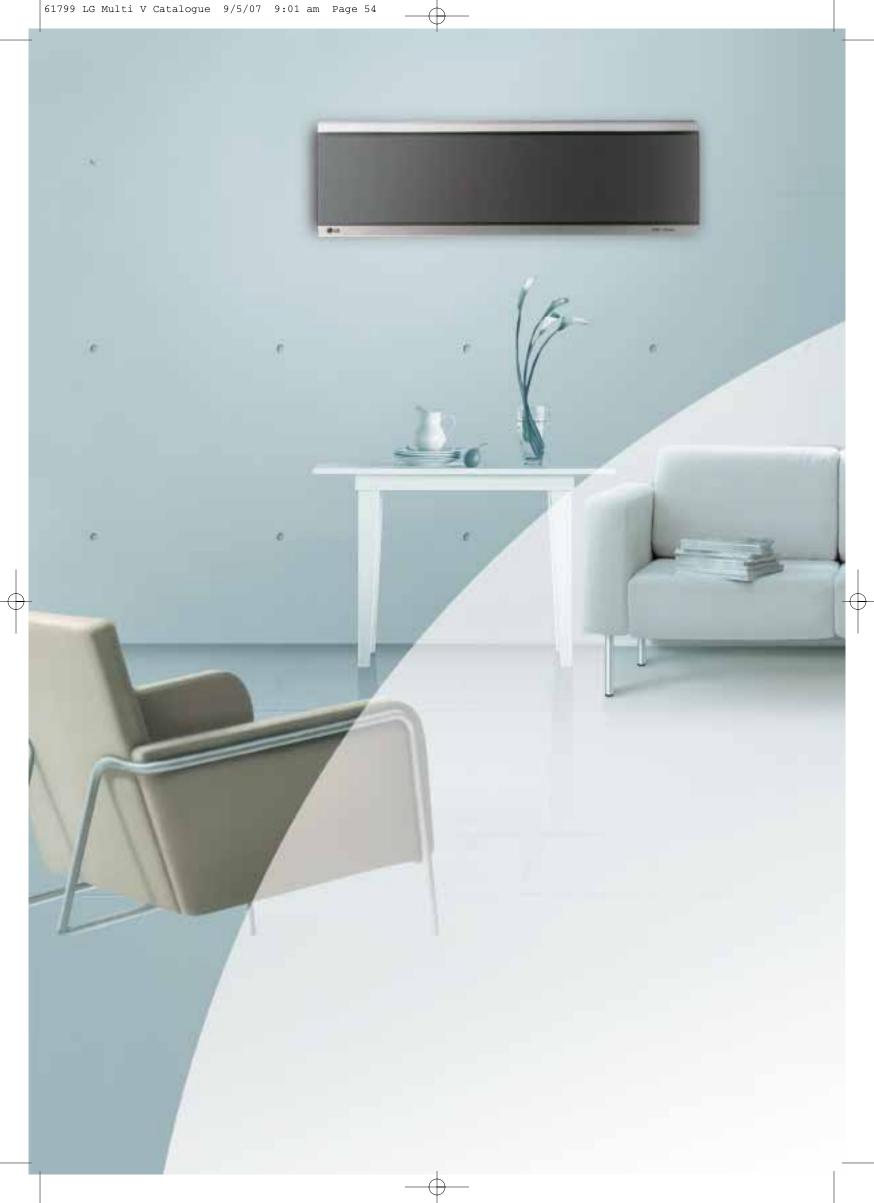
HP			5	10	
Model		Independent Unit	ARUN508RV0 (Right Discharge)	ARUN1008F20	
			ARUN508LV0 (Left Discharge)		
Capacity	Cooling	kW	14.0	28.0	
		kcal/h	12,000	24,100	
		Btu/h	47,800	95,900	
	Heating	kW	16.0	31.5	
		kcal/h	13,760	27,100	
		Btu/h	54,592	107,500	
Power Input	Cooling	kW	4.20	7.18	
	Heating	kW	4.40	7.69	
СОР	Cooling		3.33	3.90	
	Heating		3.64	4.10	
Power Supply	/	Ø / V / Hz	3/380~41	5/50	
Dimensions (	W*H*D)	mm	750*1790*650	1400*1790*650	
Weight		kg	190	350	
Color			Warm G	iray	
Sound pressu	ire levels	dB(A)	49	55	
E.S.P range		mmAq	0~7 0~14		
Fan	Туре		Siroco Fan		
	Air flow rate	[CMM]	100	170	
Compressor	Туре		DC Inverter Rotary		
	Number of com	oressors	1	2	
Heat Exchang	ger		Gold F	in	
Refrigerant	Туре		R410/	4	
	Charge	kg	4.7	9.5	
	Control		Electronic Expa	nsion Valve	
Refrigerant oil	Туре		FV50	S	
	Charge	l	2.3	4.1	
Piping	Liquid (Flare)	mm(inch)	9.52(3/8)	9.52(3/8)	
connections	Gas (Brazing)	mm(inch)	15.88(5/8)	22.2(7/8)	
Number of o	utdoor units		1	1	
Number of m	aximum connecta	able indoor units	8	16	
Ratio of the o	connectable indo	or units	50~130	)%	
Longest pipir	ng length / Elevat	ion	150m / !	50m	

## MULTI V. Indoor unit

If you need a highly efficient air conditioning system in your building, LG **MULTI V** is the right choice for you.









ART COOL Gallery



**ART COOL** Mirror



**ART COOL** Wide



**ART COOL** Panel

## **ART COOL** Series

LG's new stylish air conditioning unit is a work of art. Combine looks with efficiency and you have the ART COOL air conditioner. Looking nothing like a conventional wall mounted split system, LG has been able to create a design conscious air conditioning unit that compliments any interior decor.

### **ART COOL** Series

#### Sophisticated design

An air conditioner once installed will always be with you. You need a modern and simply designed air conditioner for your style and interior. LG ART COOL is a sophisticated design for your style.

#### Ez - replaceable color panel

Available in a wide choice of six colors (mirror, metal, blue, cherry, wood and white wood), the mirror display and classy interior curl-fit finish bring a cool and modern look. You can also easily change the color panel.











Blue	
White wood	

#### Neo Plasma Air Purifying System

LG's unique NEO Plasma Air Purifying System is equipped with 7 specialized filters in 5 separate stages to enhance its cleaning power. It reduces fine dust and mold, unpleasant odors and cigarette smoke as air passes through each filter.









# ndoor unit

#### 4 - Way auto swing

The LG air conditioning units can now automatically distribute the air 4 ways. This effectively eliminates hot and cold patches, keeping the room at a more stable temperature.



#### Digital air flow control

The air flow is controlled to provide comfort and convenience.







Jet cool speedy & powerful



Sleep mode indirectly & softly

#### 3 - Dimensional air flow

Improving conventional air conditioners that expel air in one direction only, this powerful system pours out cool air from three sides.

#### Ultra thin

Technology mixed with a touch of art results in a super slim design.



### ART COOL Series

### ART COOL Gallery

ARNU07GSF11 / ARNU09GSF11 / ARNU12GSF11

#### How to replace the picture

LG is proud to introduce the **ART COOL**SF Series. It boasts an unprecedented feature which allows you to use the front panel as a picture frame. Along with its simple and sleek design, **ART COOL** uses state-of-the-art technology for assuring customer satisfaction





Specifications



			ARNU07GSF11	ARNU09GSF11	ARNU12GSF11			
Capacity	Cooling	kW	2.2	2.8	3.6			
		kcal/h	1,900	2,400	3,100			
		Btu/h	7,500	9,600	12,300			
	Heating	kW	2.5	3.2	4.0			
		kcal/h	2,200	2,800	3,400			
		Btu/h	8,500	10,900	13,600			
Power	Cooling	w	30	30	30			
Input	Heating	w	30	30	30			
Power Sup	oly	Ø/V/Hz	1/220~240/50					
Dimension	s(W*D*H)	mm	600*146*600					
Weight		kg	15	15	15			
Sound pressure	e levels(H/M/L)	dBA±3	38/32/27	38/32/27	44/38/32			
Air f <b>l</b> ow rate	H/M/L	СММ	8.1/6.3/4.2	8.1/6.3/4.2	9.3/7.7/6.0			
Neo Plasma	air purifying	filter	Basic	Basic	Basic			
Piping	Liquid	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)			
Connection	Gas	mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)			
	Drain(OD/ <b>I</b> D)	mm	16.2/12.2	16.2/12.2	16.2/12.2			

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 Notes :
 1. Capacities are based on the following conditions

 1. Capacities are based on the following conditions
 Heating-Indoor temp. 27 C[68/F]D8 / 15'C[59'F]WB

 Cooling-Indoor temp. 37 C[95'F]D8 / 19'C[66,2'F]WB
 Outdoor temp. 70 C[48/F]D8 / 15'C[59'F]WB

 Outdoor temp. 35'C[95'F]D8 / 12'C[57:F]WB
 Outdoor temp. 70 C[46,6'F]D8 / 15'C[59'F]WB

 Interconnecting Piping Length 7.5m
 Interconnecting Piping Length 7.5m

 Level Difference of Zero
 Level Difference of Zero

 3. Due to our policy of innovation some specifications may be changed without notification

 4. LE.V. -Linear Expansion Valve

#### Accessories

Model	Model ARNU07G		ARNU09GSF11	ARNU12GSF11	
Wired	Deluxe	PQRCUDS0* (-: White, B:Blue, S:Silver)			
remote control	Standard	PCRCUSZO			
	Simple	PQRCUCA0			
	Simple (for hotel)		PQRCFCS0		
Wireless remote	control		PQWRHSF0		
Dry contact	Without case		PQDSA		
	With case		PQDSB		

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Conversion formula kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m³/min x 35.3



#### ART COOL Mirror

ARNU07GSE\*1 / ARNU09GSE\*1 / ARNU12GSE\*1 / ARNU18GS3\*1 / ARNU24GS3\*1 \* R: Mirror, M: Metal , B: Blue, D: wood, W: White wood, C: Cherry, V: Silver

07/09/12GSER1       07/09/12GSEV1       07/09/12GSEB1         MIRROR       METAL       BLE         18/24GS3R1       18/24GS3B1       18/24GS3B1         VOD       VOD       VHITE WODD       CHERV         18/24GS3D1       18/24GS3V1       18/24GS3C1	MIRROR	SI	ILVER	BLUE	
MIRROR METAL BLUE 18/24G53R1 18/24G53M1 18/24G53B1 WOOD WHITE WOOD CHERRY 18/24G53D1 18/24G53W1 18/24G53C1 Accessories	07/09/12GSER1	0	7/09/12GSEV1	07/09/12GSEB1	
WOOD WHITE WOOD 18/24GS3D1 18/24GS3W1 18/24GS3W1 18/24GS3C1 CHERRY 18/24GS3C1	MIRROR	W	IETAL	BLUE	
WOOD WHITE WOOD CHERRY 18/24G53D1 18/24G53W1 18/24G53C1 Accessories	18/24GS3R1	1	8/24GS3M1	18/24G53B1	
Accessories	WOOD		VHITE WOOD	CHERRY	
	18/24GS3D1	1	8/24GS3W1	18/24G53C1	
Wired remote controller     Wireless remote controller	Accessories				
		Wired remote controll	ler	Wireless remote controller	
Deluxe type Standard type Simple type Simple for hotel Type		·····			



Specifications

			ARNU07GSE*1	ARNU09GSE*1	ARNU12GSE*1	ARNU18GS3*1	ARNU24GS3*1
Capacity	Cooling	kW	2.2	2.8	3.6	5.6	7.1
		kcal/h	1,900	2,400	3,100	4,800	6,100
		Btu/h	7,500	9,600	12,300	19,100	24,200
	Heating	kW	2.5	3.2	4.0	6.3	8.0
		kca <b>l</b> /h	2,200	2,800	3,400	5,400	6,900
		Btu/h	8,500	10,900	13,600	21,500	27,300
Power	Cooling	w	40	40	40	40	40
Input	Heating	w	40	40	40	40	40
Power Sup	ply	Ø / V / Hz			1/220~240/50		
Dimension	s(W*D*H)	mm		915*169*282			173*315
Weight		kg	9	9	9	13	13
Sound pressure	e levels(H/M/L)	dBA±3	37/33/23	39/35/25	41/36/27	42/40/37	44/41/38
Air flow rate	H/M/L	СММ	7/6/4	8/7/5	10/8/6	12.6/11.5/10	15/14/13
Neo Plasma	a air purifying	filter	Basic	Basic	Basic	Basic	Basic
Piping	Liquid	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.52(3/8)
Connection	Gas	mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)	12.7(1/2)	15.88(5/8)
	Drain(OD/ID)	mm	20/16	20/16	20/16	20/16	20/16

Conversion formula kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m³/min x 35.3

 Notes :

 1. Capacities are based on the following conditions. Cooling-Indoor temp. 27 C[80.6F]D8 / 19°C[66.2F]WB Outdoor temp. 35 C[95'F]D8 / 24 C[75.2F]WB Interconnecting Piping Length 7.5m Level Difference of Zero
 Heating-Indoor temp. 20°C[68'F]D8 / 15°C[59'F]WB Outdoor temp. 7 C[44.6F]D8 / 6°C[42.8F]WB Interconnecting Piping Length 7.5m

 2. Capacities are net capacities 3. Due to our policy of innovation some specifications may be changed without notification
 Level Difference of Zero

 4. L.E.V. -Linear Expansion Valve
 Level Name
 Level Difference of Zero

#### Accessories

Model	ARNU07GSE*1 ARNU09GSE*1 ARNU12GSE*1 ARNU18GS3*1 ARN				ARNU24GS3*1			
Wired	Deluxe		PQRCUDS0 * (-: White, B:Blue, S:Silver)					
remote control	Standard	PCRCUSZ0						
	Simple		PQRCUCA0					
	Simple (for hotel)			PQRCFCS0				
Wireless remote	control		PQWRHSF0					
Dry contact	ntact Without case PQDSA							
	With case			PQDSB				

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### **ART COOL** Series

#### **ART COOL** Panel

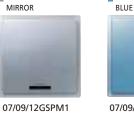
ARNU07GSP\*1 / ARNU09GSP\*1 / ARNU12GSP\*1

🕸 M: Metal, B: Blue, D: Wood, W: White wood



kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m<sup>3</sup>/min x 35.3





07/09/12GSPB1

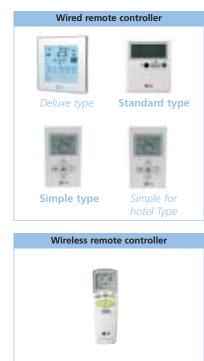




07/09/12GSPD1

07/09/12GSPW1

#### Accessories



### Specifications

			ARNU07GSP*1	ARNU09GSP*1	ARNU12GSP*1		
Capacity	Cooling	kW	2.2	2.8	3.6		
		kcal/h	1,900	2,400	3,100		
		Btu/h	7,500	9,600	12,300		
	Heating	kW	2.5	3.2	4.0		
		kcal/h	2,200	2,800	3,400		
		Btu/h	8,500	10,900	13,600		
Power	Cooling	w	30	30	30		
Input	Heating	w	30	30	30		
Power Sup	oly	Ø/V/Hz	1/220~240/50				
Dimensions	s(W*D*H)	mm	570*137*568				
Weight		kg	12	12	12		
Sound pressure	e levels(H/M/L)	dBA±3	38/34/32	40/36/33	42/38/36		
Air f <b>l</b> ow rate	H/M/L	СММ	6/5.5/5	7/6.5/6	8.7/8.1/7.5		
Neo Plasma	air purifying	filter	0	0	0		
Piping	Liquid	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)		
Connection	Gas	mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)		
	Drain(OD/ID)	mm	16.2/12.2	16.2/12.2	16.2/12.2		

 Note:
 1. Capacities are based on the following conditions

 Cooling-Indoor temp. 27 C(80.6 F)D8 / 19 C(66.2 F)WB
 Heating-Indoor temp. 20'C(68'F)

 Outdoor temp. 35 C(95'F)D8 / 24 C(75.2 F)WB
 Outdoor temp. 7C(44.6 Interconnecting Pping

 Level Difference of Zero
 Level Difference of Zero

 2. Capacities are net capacities
 Level of innovation some specifications may be changed without notification

 4. LE.V. -Linear Expansion Valve
 Valve

Heating-Indoor temp, 20'C[68'F]DB / 15'C[59'F]WB Outdoor temp, 7'C[44.6'F]DB / 6'C[42.8'F]WB Interconnecting Piping Length 7.5m Level Difference of Zero

Model		ARNU07GSP*1	ARNU09GSP*1	ARNU12GSP*1		
Wired	Deluxe	PQRC	S : Silver )			
remote control	Standard		PCRCUSZ0			
	Simple		PQRCUCA0			
	Simple (for hotel)	PQRCFCS0				
Wireless remote	control	PQWRHSF0				
Dry Contact	Without case	PQDSA				
	With case		PQDSB			

#### ART COOL Wide

ARNU18GSV\*1

✤ M: Metal , B: Blue, D: Wood, W: White Wood







ARNU18GSVM1





ARNU18GSVB1

ARNU18GSVW1

#### Accessories



			ARNU18GSV*1
Capacity	Cooling	kW	5.6
		kcal/h	4,800
		Btu/h	19,100
	Heating	kW	6.3
		kcal/h	5,400
		Btu/h	21,500
Power	Cooling	w	30
Input	Heating	w	30
Power Supp	bly	Ø/V/Hz	1/220~240/50
Dimensions	(W*D*H)	mm	928*147*522
Weight		kg	15
Sound pressure	levels(H/M/L)	dBA±3	44/39/34
Air f <b>l</b> ow rate	H/M/L	СММ	13.5/11.4/10.4
Neo Plasma air purifying filter		g filter	Basic
Piping	Liquid	mm(inch)	6.35(1/4)
Connection	Gas	mm(inch)	12.7(1/2)

 Notes :

 1. Capacities are based on the following conditions Cooling-Indoor temp. 27'C[80,6'F]DB / 19'C[66.2'F]WB Outdoor temp. 35'C[95'F]DB / 24'C[75.2'F]WB Interconnecting Piping Length 7.5m Level Difference of Zero
 Heating-Indoor temp. 20'C[68'F] Outdoor temp. 7'C[44.6 Interconnecting Piping Level Difference of Zero

 2. Capacities are net capacities 3. Due to our policy of innovation some specifications may be changed without notification 4. LE.V. -Linear Expansion Valve

Drain(OD/ID) mm

Specifications

Heating-Indoor temp. 20°C[68'F]DB / 15°C[59'F]WB Outdoor temp. 7°C[44,6'F]DB / 6°C[42,8'F]WB Interconnecting Piping Length 7.5m Level Difference of Zero

Conversion formula
kca <b>l</b> /h = kW x 860
Btu/h = kW x 3412 cfm = m³/min x 35.3

16.2/12.2

Model		ARNU18GSV*1
Wired	Deluxe	PQRCUDS0 * ( - : White, B : Blue, S : Silver )
remote control	Standard	PCRCUSZ0
	Simple	PQRCUCA0
	Simple (for hotel)	PQRCFCS0
Wireless remote	control	PQWRHSF0
Dry contact	Without case	PQDSA
	With case	PQDSB

# MULTI V. Indoor unit

If you need a highly efficient air conditioning system in your building, LG **MULTI V** is the right choice for you.

#### Wall Mounted

Ceiling Cassette - 1way

Ceiling Cassette - 2way

Ceiling Cassette - 4way

**Ceiling & Floor** 

**Ceiling Suspended** 

Ceiling Concealed Duct - High Static

Ceiling Concealed Duct - Low Static

Ceiling Concealed Duct - Built-in

Floor Standing - With Case

Floor Standing - Without Case





### Wall Mounted

#### ■ Jet Cool<sup>™</sup>

Jet cool allows quick cooling. In this mode, strong, cool air is blown at high speed for 30 minutes, until the room temperature reaches 18°C.



Jet cool™ quick, strong and cool air is blown at high speed

#### ■ Natural breeze by CHAOS swing<sup>™</sup>

The Chaos technology recreates the flow of natural air by controlling the angle speed and movement of the air vane. It also minimizes the temperature difference between high and low areas in the room, creating a more comfortably conditioned environment.

#### Auto restart function

In the event of sudden power failure, the auto start mechanism saves the current setting. It will restore the air conditioner to its previous setting when the power returns.

#### Neo Plasma Air Purifying System

LG's unique NEO Plasma Air Purifying System is equipped with 7 specialized filters in 5 separate stages to enhance its cleaning power. It reduces fine dust and mold, unpleasant odors and cigarette smoke as air passes through each filter.





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#### Indoor unit

#### Wall Mounted

ARNU07GSEL1 / ARNU09GSEL1 ARNU12GSEL1 / ARNU18GS5L1 ARNU24GS5L1





Conversion formula

kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m³/min x 35.3

Indoor unit

### Specifications

			ARNU07GSEL1	ARNU09GSEL1	ARNU12GSEL1	ARNU18GS5L1	ARNU24GS5L1	
Capacity	Cooling	kW	2.2	2.8	3.6	5.6	7.1	
		kca <b>l</b> /h	1,900	2,400	3,100	4,800	6,100	
		Btu/h	7,500	9,600	12,300	19,100	24,200	
	Heating	kW	2.5	3.2	4.0	6.3	8.0	
		kcal/h	2,200	2,800	3,400	5,400	6,900	
		Btu/h	8,500	10,900	13,600	21,500	27,300	
Power	Cooling	w	40	40	40	40	40	
Input	Heating	w	40	40	40	40	40	
Power Supp	oly	Ø/V/Hz	1/220~240/50					
Dimensions	s(W*D*H)	mm	895*165*282			1090*	178*300	
Weight		kg	9	9	9	12	12	
Sound pressure	e levels(H/M/L)	dBA±3	37/33/23	39/35/25	41/36/27	44/40/36	46/41/38	
Air flow rate	H/M/L	СММ	5.6/5/4.6	7/6.5/6	9.5/9/8.5	12/10.5/9	16/13/11	
Neo Plasma	air purifying	filter	Basic	Basic	Basic	Basic	Basic	
Piping	Liquid	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.52(3/8)	
Connection	Gas	mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)	12.7(1/2)	15.88(5/8)	
	Drain(OD/ID)	mm	20/16	20/16	20/16	20/16	20/16	

 Notes :
 I. capacities are based on the following conditions

 Cooling-Indoor temp. 27 C[80.6 F]DB / 19 C[66,27 F]WB
 Heating-Indoor temp. 20 C[68/F]

 Outdoor temp. 35 C[95 F]DB / 24 C[75,27 F]WB
 Outdoor temp. 7C[44.6

 Interconnecting Piping Length 7.5m
 Interconnecting Piping Length 7.5m

 Level Difference of Zero
 Level Difference of Zero

 3. Due to our policy of innovation some specifications may be changed without notification
 L.E.V.-Linear Expansion Valve

Heating-Indoor temp, 20°C[68'F]DB / 15°C[59'F]WB Outdoor temp, 7°C[44,6'F]DB / 6°C[42,8'F]WB Interconnecting Piping Length 7.5m Level Difference of Zero

#### Accessories

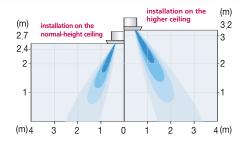
Model		ARNU07GSEL1	ARNU09GSEL1	ARNU12GSEL1	ARNU18GS5L1	ARNU24GS5L1
Wired	Deluxe	PQRCUDS0* (-: White, B:Blue, S:Silver)				
remote control	Standard		PCRCUSZ0			
	Simple	PQRCUCA0				
	Simple (for hotel)	PQRCFCS0				
Wireless remote	control	PQWRHSF0				
Dry Contact	Without case			PQDSA		
	With case			PQDSB		

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### Ceiling Cassette - 1way

#### Function to control the air volume by ceiling height

Control of the air intensity has been made possible by employing a height-control algorithm for the interior fan.



#### Airflow direction control

#### Group control (wired remote control)

When several products are linked, one specific control device can control a specific number of products.

#### ■ Jet cool<sup>™</sup>

Jet cool allows quick cooling. In this mode, strong, cool air is blown at high speed for 30 minutes, until the room temperature reaches 18°C.

#### Drain pump

Built-in drain pump automatically drains water.

#### Auto restart function

In the event of sudden power failure, the auto start mechanism saves the current setting. It will restore the air conditioner to its previous setting when power returns.

#### Plasma filter

The PLASMA Air Purifying System developed uniquely by LG not only removes microscopic contaminants and dust, but also removes house mites, pollen, and pet fur to prevent allergic diseases like asthma.

Wired remote con	Wired remote controller					
Deluxe type       Standard type       Simple	e type Simple for hotel Type					

#### Ceiling Cassette - 1way

ARNU07GTJC1 / ARNU09GTJC1 / ARNU12GTJC1



Specifications

			ARNU07GTJC1	ARNU09GTJC1	ARNU12GTJC1		
Capacity	Cooling	kW	2.2	2.8	3.6		
		kcal/h	1,900	2,400	3,100		
		Btu/h	7,500	9,600	12,300		
	Heating	kW	2.5	3.2	4.0		
		kcal/h	2,200	2,800	3,400		
		Btu/h	8,500	10,900	13,600		
Power Input	Cooling	W	45	45	45		
	Heating	w	40	40	40		
Power Sup	ply	Ø/V/Hz	1/220~240/50				
Dimensions	Body	mm		860*410*138			
(W*D*H)	Front Panel	mm		1070*480*20			
Weight	Body	kg	11.5	11.5	11.5		
	Front Panel	kg	1.5	1.5	1.5		
Panel Color			White				
Sound pressu	re levels(H/M/L)	dBA $\pm$ 3	40/38/37	40/38/37	41/39/37		
Air flow rate	H/M/L	СММ	7.5/6.5/6	7.5/6.5/6	8/7/6		
Neo Plasma	air purifying f	ilter	Basic	Basic	Basic		
Drain Pump			0	0	0		
Piping	Liquid	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)		
Connection	Gas	mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)		
	Drain(OD/ <b>I</b> D)	mm	32/25	32/25	32/25		

Notes : 1. Capacities are based on the following conditions Cooling-Indoor temp. 27 C(80.6°F)D8 / 19 C(66.2°F)WB Outdoor temp. 35 C(95°F)D8 / 24 C(75.2°F)WB Interconnecting Piping Length 7.5m Level Difference of Zero 2. Capacities are net capacities 3. Due to our policy of innovation some specifications may 4. LE.V. -Linear Expansion Valve Heating-Indoor temp. 20°C[68'F]DB / 15'C[59'F]WB Outdoor temp. 7'C[44.6'F]DB / 6'C[42.8'F]WB Interconnecting Piping Length 7.5m Level Difference of Zero

cifications may be changed without notification

#### Accessories

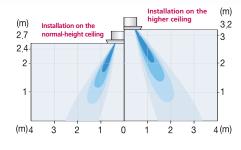
Model		ARNU07GTJC1	ARNU09GTJC1	ARNU12GTJC1	
Wired	Deluxe		PQRCUDS0 * (-: White, B:Blue, S:Silver)		
remote control	Standard	PCRCUSZO			
	Simple	PQRCUCA0			
	Simple (for hotel)		PQRCFCS0		
Wireless remote	control		PQWRHSF0		
Dry contact	Without case		PQDSA		
	With case		PQDSB		
Front panel			PT-HJC		

kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m³/min x 35.3

### Ceiling Cassette - 2way

#### Function to control the air volume by ceiling height

Control of the air intensity has been made possible by employing a height-control algorithm for the interior fan.



#### Airflow direction control

#### Group control (wired remote control)

When several products are linked, one specific control device can control a specific number of products.

#### ■ Jet cool<sup>™</sup>

Jet cool allows quick cooling. In this mode, strong, cool air is blown at high speed for 30 minutes, until the room temperature reaches 18°C.

#### Drain pump

Built-in drain pump automatically drains water.

#### Auto restart function

In the event of sudden power failure, the auto start mechanism saves the current setting. It will restore the air conditioner to its previous setting when power returns.

#### Plasma filter

The PLASMA Air Purifying System developed uniquely by LG not only removes microscopic contaminants and dust, but also removes house mites, pollen, and pet fur to prevent allergic diseases like asthma.



### Ceiling Cassette - 2way

ARNU18GTLC1 / ARNU24GTLC1

### Specifications



Indoor unit

Model			ARNU18GTLC1	ARNU24GTLC1	
Capacity	Cooling	kW	5.6	7.1	
		kcal/h	4,800	6,100	
		Btu/h	19,100	24,200	
	Heating	kW	6.3	8.0	
		kcal/h	5,400	6,900	
		Btu/h	21,500	27,300	
Power Input	Cooling	W	70	70	
	Heating	w	66	66	
Power Suppl	ly	Ø/V/Hz	1/220~	240/50	
Dimensions	Body	mm	830*55	0*225	
(W*D*H)	Front Panel	mm	1050*6	i40*28.5	
Weight	Body	kg	28	28	
	Front Panel	kg	4	4	
Panel Color			White		
Sound pressur	e levels(H/M/L)	dBA±3	40/35/30	42/37/32	
Air flow rate	H/M/L	СММ	13/12/10	17/15/13	
Neo Plasma	air purifying f	ilter	Basic	Basic	
Drain Pump			0	0	
Piping	Liquid	mm(inch)	6.35(1/4)	9.52(3/8)	
Connection	Gas	mm(inch)	12.7(1/2)	15.88(5/8)	
	Drain(OD/ <b>I</b> D)	mm	32/25	32/25	
Cooling-Indo Outc Inter					

 Capacities are based on the following conditions Cooling-Indoor temp, 27 (280.6FIDB / 192166.2FIWB Outdoor temp, 35 (295FIDB / 24'C(75.2F]WB Interconnecting Piping Length 7.5m Length 20 Difference of Zero 2. Capacities are net capacities 3. Due to our policy of innovation some specifications may 4. LE.V.-Linear Expansion Valve Heating-Indoor temp. 20°C[68'F]DB / 15°C[59'F]WB Outdoor temp. 7°C[44,6'F]DB / 6°C[42,8'F]WB Interconnecting Piping Length 7.5m Level Difference of Zero

specifications may be changed without notification

Model		ARNU18GTLC1	ARNU24GTLC1
Wired	Deluxe	PQRCUDS0 * (-: White, B:Blue, S:Silver)	
remote control	Standard	PCRCUSZ0	
	Simple	PQRCUCA0	
	Simple (for hotel)	PQRCFCS0	
Wireless remote	control	PQWRHSF0	
Dry contact	Without case	PQDSA	
	With case	PQDSB	
Front panel		PT-HLC	

### Ceiling Cassette - 4Way

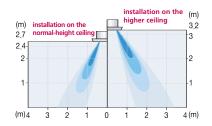
#### Super slim

The indoor unit with one of the smallest and compact designs on the market based on a three-dimensional CAD and CAE computer system has successfully reduced the space it occupies and enabled installation in various spaces. (TH window frames)

#### Function to control the air volume by ceiling height

Control of the air intensity has been made possible by employing a height-control algorithm for the interior fan.





#### Airflow direction control

#### ■ Jet cool<sup>™</sup>

Jet cool allows quick cooling. In this mode, strong, cool air is blown at high speed for 30 minutes, until the room temperature reaches 18°C.

#### Drain pump

Built-in drain pump automatically drains water.

#### Auto restart function

In the event of sudden power failure, the auto start mechanism saves the current setting. It will restore the air conditioner to its previous setting when power returns.

#### Plasma filter

The PLASMA Air Purifying System developed uniquely by LG not only removes microscopic contaminants and dust, but also removes house mites, pollen, and pet fur to prevent allergic diseases like asthma.

Wired remote controller		Wireless remote controller
Deluxe type       Standard type       Simple	type Simple for hotel Type	

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#### Indoor unit

#### **Ceiling Cassette - 4way**

ARNU07GTEC1 / ARNU09GTEC1 / ARNU12GTEC1 ARNU18GTEC1 / ARNU24GTHC1 / ARNU28GTHC1 ARNU36GTDC1 / ARNU42GTDC1 / ARNU48GTDC1

### Specifications



ndoor unit

			ARNU07GTEC1	ARNU09GTEC1	ARNU12GTEC1	ARNU18GTEC1	ARNU24GTHC1	ARNU28GTHC1	ARNU36GTDC1	ARNU42GTDC1	ARNU48GTD	
Capacity	Cooling	kW	2.2	2.8	3.6	5.6	7.1	8.2	10,6	12.3	14.1	
		kca <b>l</b> /h	1,900	2,400	3,100	4,800	6,100	7,100	9,100	10,600	12,100	
		Btu/h	7,500	9,600	12,300	19,100	24,200	28,000	36,200	42,000	48,100	
	Heating	kW	2.5	3.2	4.0	6.3	8.0	9.2	11.9	13.8	15.9	
		kca <b>l</b> /h	2,200	2,800	3,400	5,400	6,900	8,000	10,200	11,000	13,200	
		Btu/h	8,500	10,900	13,600	21,500	27,300	31,500	40,600	43,800	51,200	
Power Input	Cooling	w	40	40	40	40	33	33	144	144	144	
	Heating	w	40	40	40	40	33	33	144	144	144	
ower Supp	y	Ø/V/Hz		1/220~240/50								
Dimensions	Body	mm	570*570*269			840*840*225 84		0*840*288				
(W*D*H)	Front Panel	mm		670*6	570*30		950*950*30		950*950*30			
Weight	Body	kg	19	19	19	19	24	24	32	32	32	
	Front Panel	kg	2.5	2.5	2.5	2.5	4.5	4.5	4.5	4.5	4.5	
anel Color			Morning Fog									
Sound pressur	re levels(H/M/L)	dBA±3	40/38/37	40/38/37	41/35/32	43/37/35	38/35/31	39/38/32	43/40/39	47/44/42	48/47/45	
Air flow rate	H/M/L	СММ	9/8/7	9/8/7	11/10/9	13/12/10	17/15/13	19/16/14	25/21/19	30/27/24	31/29/27	
Neo Plasma	a air purifying f	ilter	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	
Drain Pump			0	0	0	0	0	0	0	0	0	
Piping	Liquid	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8	
Connection	Gas	mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)	12.7(1/2)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8	
	Drain(OD/ID)	mm	32/25	32/25	32/25	32/25	32/25	32/25	32/25	32/25	32/25	

 Notes:
 1. Capacities are based on the following conditions Cooling-Indoor temp. 27'(80.6'F)DB / 19'C[66.2'F]WB Outdoor temp. 35'C[95'F]DB / 24'C[75.2'F]WB Interconnecting Piping Length 7.5m
 Heating-Indoor temp. 20'C[68'F] Outdoor temp. 7'C[44.6 Interconnecting Piping Level Difference of Zero

 2. Capacities are net capacities 3. Due to our policy of innovation some specifications may be changed without notification 4. LE.V. -Linear Expansion Valve

 Heating-Indoor temp. 20°C[68'F]DB / 15°C[59'F]WB Outdoor temp. 7°C[44.6'F]DB / 6°C[42.8'F]WB Interconnecting Piping Length 7.5m Level Difference of Zero

#### Accessories

Model		ARNU07GTEC1 ARNU09GTEC1 ARNU12GTEC1 ARNU18GTEC1	ARNU24GTHC1 ARNU28GTHC1 ARNU36GTDC1 ARNU42GTDC1 ARNU48GTDC1					
Wired	Deluxe	PQRCUDS0*	– : White, B : Blue, S : Silver )					
remote control	Standard	PCRCUSZ0						
	Simple		PQRCUCA0					
	Simple (for hotel)		PQRCFCS0					
Wireless remote	control	PQWRHSF0						
Dry contact	Without case	PQDSA						
	With case		PQDSB					
Front panel		PT-HEC1	PT-HDC1					

kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m³/min x 35.3

# Ceiling & Floor

#### ■ Natural breeze by CHAOS swing<sup>™</sup>

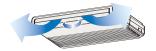
The Chaos technology recreates the flow of natural air by controlling the angle speed and movement of the air vane. It also minimizes the temperature difference between high and low areas in the room, creating a more comfortably conditioned environment.

#### Weekly program (wired remote control)

If necessary, an operator can make an on/off reservation of the product for a period of one week.

#### Auto restart function

In the event of sudden power failure, the auto start mechanism saves the curren setting. It will restore the air conditioner to its previous setting when power returns.



Airflow direction control Horizontal airflow direction control. manual control



Vertical airflow direction control. Airflow direction control The airflow direction can be adjusted by using the remote control.



### Indoor unit

#### Ceiling & Floor

ARNU09GVEA1 / ARNU12GVEA1

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Indoor unit

### Specifications

			ARNU09GVEA1	ARNU12GVEA1			
Capacity	Cooling	kW	2.8	3.6			
		kca <b>l</b> /h	2,400	3,100			
		Btu/h	9,600	12,300			
	Heating	kW	3.2	4.0			
		kca <b>l</b> /h	2,800	3,400			
		Btu/h	10,900	13,600			
Power	Cooling	w	30	30			
Input	Heating	w	30	30			
Power Supp	oly	Ø/V/Hz	1/220~240/50				
Dimensions	s(W*D*H)	mm	900*200*490				
Weight		kg	12	12			
Sound pressure	e levels(H/M/L)	dBA±3	36/32/28	38/36/30			
Air f <b>l</b> ow rate	H/M/L	СММ	7.6/6.9/6.2	9.2/7.6/6.9			
Plasma air I	purifying filte	er	-	-			
Piping	Liquid	mm(inch)	6.35(1/4)	6.35(1/4)			
Connection	Gas	mm(inch)	12.7(1/2)	12.7(1/2)			
	Drain(OD/ID)	mm	20/16	20/16			

 Note:
 1. Capacities are based on the following conditions Cooling-Indoor temp. 27 (280.6 F)D8 / 19 °C(56.2 F)WB Outdoor temp. 35 °C(95 F)D8 / 24 °C(75.2 F)WB Interconnecting Piping Length 7.5m Level Difference of Zero
 Heating-Indoor temp. 20 °C(68 °F)I

 2. Capacities are net capacities
 Level Difference of Zero
 Level Difference of Zero

 3. Due to our policy of innovation some specifications may be changed without notification
 A. L.E.V. -Linear Expansion Valve

 Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB Interconnecting Piping Length 7.5m Level Difference of Zero

kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m<sup>3</sup>/min x 35.3

Accessories

Model		ARNU09GVEA1	ARNU12GVEA1
Wired	Deluxe	PQRCUDS0 * (-: White, B:B	llue, S : Silver )
remote control	Standard	PCRCUSZO	
	Simple	PQRCUCA0	
	Simple (for hotel)	PQRCFCS0	
Wireless remote	control	PQWRHSF0	
Dry contact	Without case	PQDSA	
	With case	PQDSB	

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### **Ceiling Suspended**

#### ■ Natural breeze by CHAOS swing<sup>™</sup>

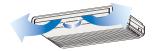
The Chaos technology recreates the flow of natural air by controlling the angle speed and movement of the air vane. It also minimizes the temperature difference between high and low areas in the room, creating a more comfortably conditioned environment.

#### Weekly program (wired remote control)

If necessary, an operator can make an on/off reservation of the product for a period of one week.

#### Auto restart function

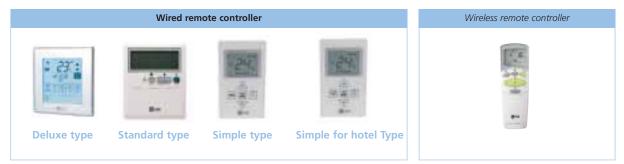
In the event of sudden power failure, the auto start mechanism saves the curren setting. It will restore the air conditioner to its previous setting when power returns.



Airflow direction control Horizontal airflow direction control. manual control



Vertical airflow direction control. Airflow direction control The airflow direction can be adjusted by using the remote control.



### Indoor unit

**Ceiling Suspended** 

ARNU18GVJA1 / ARNU24GVJA1





Specifications

Model		Unit	ARNU18GVJA1	ARNU24GVJA1				
Capacity	Cooling	kW	5.6	7.1				
		kcal/h	4.800	6,100				
		Btu/h	19.100	24,200				
	Heating	kW	6.3	8.0				
		kca <b>l</b> /h	5,400	6,900				
		Btu/h	21,500	27,300				
Power	Cooling	w	63	63				
Input	Heating	w	63	63				
Power Supp	oly	Ø/V/Hz	1/220~240/50					
Dimensions	s(W*D*H)	mm	950*220*650					
Weight		kg	15	15				
Sound pressure	e levels(H/M/L)	dBA±3	42/40/37	43/41/39				
Air flow rate	H/M/L	СММ	16/14/12	18/16/14				
Plasma air j	purifying filte	er	-	-				
Piping	Liquid	mm(inch)	6.35(1/4)	9.52(3/8)				
Connection	Gas	mm(inch)	12.7(1/2)	15.88(5/8)				
	Drain(OD/ <b>I</b> D)	mm	20/16	20/16				
Notes :       1. Capacities are based on the following conditions         Cooling-Indoor temp, 27 C[80.6 F]DB / 19 C[66.2 F]WB       Heating-Indoor temp, 20 C[68 'F]DB / 15 'C[59 'F]WB         Outdoor temp, 32 (195 F]DB / 24 (195.2 F]WB       Heating-Indoor temp, 20 C[68 'F]DB / 15 'C[59 'F]WB         Outdoor temp, 32 (195 F]DB / 24 (195.2 F]WB       Utdoor temp, 32 (195 F]DB / 45 (195.2 F]WB         Interconnecting Piping Length 7.5m       Interconnecting Piping Length 7.5m         Level Difference of Zero       Level Difference of Zero								

2. Capacities are net capacities
3. Due to our policy of innovation some specifications may be changed without notification
4. L.E.V.-Linear Expansion Valve

Model		ARNU18GVJA1	ARNU24GVJA1
Wired	Deluxe	PQRCUDS0 * ( – : White, E	3 : Blue, S : Silver )
remote control	Standard	PCRCUSZ0	
	Simple	PQRCUCA0	
	Simple (for hotel)	PQRCFCS0	
Wireless remote	control	PQWRHSF0	
Dry contact	Without case	PQDSA	
	With case	PQDSB	

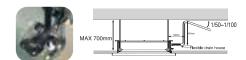
### Ceiling Concealed Duct - High Static

#### Linear E.S.P (External Static Pressure) control

Air volume and noise level is alaways kept stable as initially designed regardless of external static pressure variation.

#### Drain pump

Built-in drain pump automatically drains water.



#### Weekly program (wired remote control)

If necessary, an operator can make an on/off reservation of the product for a period of one week.

#### Quiet operation & easy service

Innovative design for blower and housing system low noise! light weight! easy serviceability plastic blower and housing

- Designed for low noise
- Designed to reduce weight.
- Designed for easy service with separated housing.

This product will guarantee you lower sound level and less service expenses.



If you want to use wireless remote control, have to need wired remote control (High static, Low static, Built-in, Floor Standing)

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#### Indoor unit

#### **Ceiling Concealed Duct - High Static**

ARNU18GBHA1 / ARNU24GBHA1 / ARNU28GBGA1 ARNU36GBGA1 / ARNU42GBGA1 / ARNU48GBRA1





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kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m³/min x 35 3

			ARNU18GBHA1	ARNU24GBHA1	ARNU28GBGA1	ARNU36GBGA1	ARNU42GBGA1	ARNU48GBRA1		
Capacity	Cooling	kW	5.6	7.1	8.2	10.6	12.3	14.1		
		kcal/h	4,800	6,100	7,100	9,100	10,600	12,100		
		Btu/h	19,100	24,200	28,000	36,200	42,000	48,100		
	Heating	kW	6.3	8.0	9.2	11.9	13.8	15.9		
		kcal/h	5,400	6,900	8,000	10,200	11,000	13,200		
		Btu/h	21,500	27,300	31,500	40,600	43,800	51,200		
Power	Cooling	w	150	150	450	450	450	450		
nput	Heating	w	150	150	430	430	430	430		
ower Supp	ply	Ø/V/Hz	1/220~240/50							
Dimensions	s(W*D*H)	mm	882*450*260		1182*450*298			1230*590*380		
Veight		kg	34	35	38	38	38	53		
ound pressure	e levels(H/M/L)	dBA±3	42.5/41/37	45/43/41	44/42/40	46/44/42	48/46/45	45/43/41		
E.S.P range	2	mmAq	4~12		6~12		6~13	7~18		
Air flow rate	H/M/L	СММ	15.5/13.5/12.4	18.3/16.9/15.5	25.9/24.1/21.8	32.3/29.0/25.3	34.5/32.3/30.7	44.8/40.6/33.3		
Plasma air j	purifying filte	er	-	-	-	-	-	-		
Piping	Liquid	mm(inch)	6.35(1/4)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)		
Connection	Gas	mm(inch)	12.7(1/2)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)		
	Drain(OD/ <b>I</b> D)	mm	32/25	32/25	32/25	32/25	32/25	32/25		

 Notes :

 1. Capacities are based on the following conditions

 Cooling-Indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB

 Outdoor temp. 35°C(95°F)DB / 24°C(75.2°F)WB

 Outdoor temp. 35°C(95°F)DB / 24°C(75.2°F)WB

 Interconnecting Piping Length 7.5m

 Level Difference of Zero

 2. Capacities are net capacities

 3. Due to our policy of innovation some specifications may be changed without notification

 4. LE.V. -Linear Expansion Valve

Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB Interconnecting Piping Length 7.5m Level Difference of Zero

#### Accessories

Model		ARNU18GBHA1	ARNU24GBHA1	ARNU28GBGA1	ARNU36GBGA1	ARNU42GBGA1	ARNU48GBRA1
Wired	Deluxe			PQRCUDS0 * (-: Whit	e, B : Blue, S : Silver )		
remote control	Standard			PDRC	USZ0		
	Simple			PQRC	JCA0		
	Simple (for hotel)			PQRC	FCS0		
Wireless remote	e control	PQWRHSF0					
Dry contact Without case		PQDSA					
	With case	PQDSB					

 $\oplus$ 

### Ceiling Concealed Duct - Low Static

#### Linear

#### E.S.P (External Static Pressure) control

Air volume and noise level is alaways kept stable as initially designed regardless of external static pressure variation.

#### Group control (wired remote control)

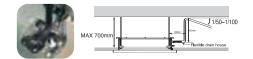
When several products are linked, one specific control device can control a specific number of products.

#### Weekly program (wired remote control)

If necessary, an operator can make an On/Off reservation of the product for a period of one week.

#### Drain pump

Built-in drain pump automatically drains water.



#### Super slim (190mm)

The indoor unit with one of the smallest and compact designs on the market based on a three-dimensional CAD and CAE computer system has successfully reduced the space it occupies and enabled installation in various spaces.

#### Quiet operation & easy service

Innovative design for blower and housing system low noise! light weight! easy serviceability plastic blower and housing

- Designed for low noise
- Designed to reduce weight.
- Designed for easy service with separated housing.

This product will guarantee you lower sound level and less service expenses.

#### Accessories

Wired ren	Wireless remote controller		
Deluxe typeStandard type	Simple type	Simple for hotel Type	

If you want to use wireless remote control, have to need wired remote control (High static, Low static, Built-in, Floor Standing)

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#### Indoor unit

#### **Ceiling Concealed Duct - Low Static**

ARNU07GB1G1 / ARNU09GB1G1 / ARNU12GB1G1 ARNU18GB2G1 / ARNU24GB2G1

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kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m³/min x 35.3

Indoor uni

### Specifications

ARNU07GB1G1 ARNU09GB1G1 ARNU12GB1G1 ARNU18GB2G1 ARNU24GB2G1 Capacity Cooling kW 2.2 2.8 3.6 5.6 7.1 kca**l**/h 1,900 2.400 3,100 4,800 6,100 Btu/h 7,500 9,600 12,300 19,100 24,200 Heating kW 2.5 3.2 4.0 6.3 8.0 kca**l**/h 2,200 2,800 3,400 5,400 6,900 Btu/h 10,900 27,300 8,500 13,600 21,500 Cooling w Power 30 30 80 30 80 Input Heating w 30 30 30 80 80 Power Supply Ø/V/Hz 1/220~240/50 Dimensions(W\*D\*H) mm 820\*575\*190 1100\*575\*190 Weight kg 17 17 17 21 21 Sound pressure levels(H/M/L)  $dBA{\pm}3$ 35/33/31 40/37/34 43/40/37 36/34/32 37/35/33 E.S.P range mmAq 0~4 Air flow rate H/M/L СММ 8.7/7.5/6.5 9.5/8.5/7.5 10.5/9.5/8.5 16/14/12 19/17/15 Plasma air purifying filter -\_ ---Piping Liquid mm(inch) 6.35(1/4) 6.35(1/4) 9.52(3/8) 6.35(1/4) 6.35(1/4) Connection Gas mm(inch) 12.7(1/2) 12.7(1/2) 15.88(5/8) 12.7(1/2) 12.7(1/2) Drain(OD/ID) mm 32/25 32/25 32/25 32/25 32/25 Conversion formula

Notes : 1. Capacities are based on the following conditions Cooling-Indoor temp. 27'C[80.6'F]D8 / 19'C[66.2'F]WB Outdoor temp. 35'C[95'F]D8 / 24'C[75.2'F]WB Interconnecting Piping Length 7.5m Level Difference of Zero Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB Interconnecting Piping Length 7.5m Level Difference of Zero

Capacities are net capacities
 Due to our policy of innovation some specifications may be changed without notification
 LEV.-Linear Expansion Valve

Model		ARNU07GB1G1	ARNU09GB1G1	ARNU12GB1G1	ARNU18GB2G1	ARNU24GB2G1	
Wired	Deluxe		PQRCU	JDS0 * ( – : White, B : Blue, S	: Silver )		
remote control	Standard			PDRCUSZ0			
	Simple			PQRCUCA0			
	Simple (for hotel)			PQRCFCS0			
Wireless remote	control	PQWRHSF0					
Dry contact	Without case			PQDSA			
	With case			PQDSB			

### Ceiling Concealed Duct - Built-in

#### Linear

#### E.S.P (External Static Pressure) control

Air volume and noise level is alaways kept stable as initially designed regardless of external static pressure variation.

#### Group control (wired remote control)

When several products are linked, one specific control device can control a specific number of products.

#### Weekly program (wired remote control)

If necessary, an operator can make an On/Off reservation of the product for a period of one week.

#### Quiet operation & easy service

Innovative design for blower and housing system low noise! light weight! easy serviceability plastic blower and housing

- Designed for low noise
- Designed to reduce weight.
- Designed for easy service with separated housing.

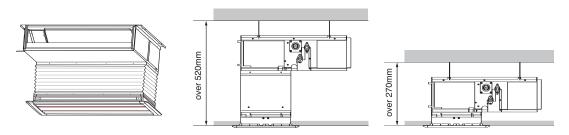
This product will guarantee you lower sound level and less service expenses.

#### 💻 Drain pump

Built-in drain pump automatically drains water.



#### Installation scene



#### Accessories

Wired remote controller	Wireless remote controller
Deluxe type       Standard type       Simple type       Simple for hotel Type	

If you want to use wireless remote control, have to need wired remote control (High static, Low static, Built-in, Floor Standing)

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#### Indoor unit

#### **Ceiling Concealed Duct - Built-in**

ARNU07GB3G1 / ARNU09GB3G1 / ARNU12GB3G1 ARNU18GB4G1 / ARNU24GB4G1

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kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m<sup>3</sup>/min x 35.3

ndoor unit

### Specifications

ARNU07GB3G1 ARNU09GB3G1 ARNU12GB3G1 ARNU24GB4G1 ARNU18GB4G1 Cooling Capacity kW 2.2 2.8 3.6 5.6 7.1 kcal/h 1,900 2,400 3,100 6,100 4,800 Btu/h 7,500 9,600 12,300 24,200 19,100 Heating kW 2.5 3.2 4.0 6.3 8.0 kcal/h 2,200 2,800 3,400 5.400 6.900 Btu/h 8,500 10,900 13,600 21,500 27,300 Power Cooling w 30 30 30 80 80 Heating w 30 80 80 Input 30 30 Ø/V/Hz 1/220~240/50 Power Supply 1100\*575\*190 820\*575\*190 Dimensions (W\*D\*H) mm 1188\*359\*56 Suction grille (W\*D\*H) mm 910\*359\*56 Suction canvas (W\*D\*H) mm 821\*274\*(45~250) 1100\*274\*(45~250) Weight kg 17 17 17 21 21 Sound pressure levels(H/M/L) dBA±3 37/34/33 39/35/34 40/37/34 43/40/37 46/43/37 E.S.P range 0~4 mmAq Air flow rate H/M/L CMM 9/7.5/6 8/6.5/5.5 10/8.5/6.5 14/12/10 17/15/10 Plasma air purifying filter \_ \_ \_ -Pipina Liauid mm(inch) 6.35(1/4) 6.35(1/4) 6.35(1/4) 6.35(1/4) 9.52(3/8) Connection Gas mm(inch) 12.7(1/2) 12.7(1/2) 12.7(1/2) 12.7(1/2) 15.88(5/8) Drain(OD/ID) mm 32/25 32/25 32/25 32/25 32/25 Conversion formula

Notes : 1. Capacities are based on the following conditions Cooling-Indoor temp. 27 (200.6°F)D8 / 19 (2166.2°F)WB Outdoor temp. 35 (295°F)D8 / 24 (275.2°F)WB Interconnecting Piping Length 7.5m Level Difference of Zero

Heating-Indoor temp. 20°C[68'F]DB / 15°C[59'F]WB Outdoor temp. 7°C[44.6'F]DB / 6°C[42.8'F]WB Interconnecting Piping Length 7.5m Level Difference of Zero

 Capacities are net capacities
 Due to our policy of innovation
 L.E.V. -Linear Expansion Valve some specifications may be changed without notification

#### Accessories

Model		ARNU07GB3G1	ARNU09GB3G1	ARNU12GB3G1	ARNU18GB4G1	ARNU24GB4G1		
Wired	Deluxe		PQR	CUDS0 * ( – : White, B : Blue, S	S:Silver)			
remote control	Standard			PDRCUSZ0				
	Simple			PQRCUCA0				
	Simple (for hotel)			PQRCFCS0				
Wireless remote	e control	PQWRHSF0						
Dry contact	Without case			PQDSA				
	With case	PQDSB						
Suction grille		PBSGB30			PB	SGB40		
Suction canvas			PBSC30		PE	3SC40		

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### Floor Standing - With Case

#### Weekly program (wired remote control)

If necessary, an operator can make an on/off reservation of the product for a period of one week.

#### Auto restart function

In the event of sudden power failure, the auto start mechanism saves the curren setting. It will restore the air conditioner to its previous setting when power returns.

#### Child lock function

This function prevents the tampering of the control buttons on the unit allowing control via the remote controller only.

#### Accessories



If you want to use wireless remote control, have to need wired remote control (High static, Low static, Built-in, Floor Standing)

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#### Indoor unit

#### Floor Standing- With Case

ARNU07GCEA1 / ARNU09GCEA1 ARNU12GCEA1 / ARNU18GCFA1 ARNU24GCFA1





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### Specifications

			ARNU07GCEA1	ARNU09GCEA1	ARNU12GCEA1	ARNU18GCFA1	ARNU24GCFA1	
Capacity	Cooling	kW	2.2	2.8	3.6	5.6	7.1	
		kcal/h	1,900	2,400	3,100	4,800	6,100	
		Btu/h	7,500	9,600	12,300	19,100	24,200	
	Heating	kW	2.5	3.2	4.0	6.3	8.0	
		kcal/h	2,200	2,800	3,400	5,400	6,900	
		Btu/h	8,500	10,900	13,600	21,500	27,300	
Power	Cooling	w	30	30	30	80	80	
Input	Heating	w	30	30	30	80	80	
Power Supply Ø/V/Hz		Ø/V/Hz	1/220~240/50					
Dimensions	s(W*D*H)	mm	1067*203*635			1345*	203*635	
Weight		kg	27	27	27	34	34	
Sound pressure	e levels(H/M/L)	dBA±3	35/33/31	36/34/32	37/35/33	40/37/34	43/40/37	
Air flow rate	H/M/L	СММ	8.5/7.5/6.5	9.5/8.5/7.5	10.5/9.5/8.5	16/14/12	18/16/14	
Plasma air j	purifying filte	۰r	-	-	-	-	-	
Piping	Liquid	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.52(3/8)	
Connection	Gas	mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)	12.7(1/2)	15.88(5/8)	
	Drain(OD/ <b>I</b> D)	mm	16/12	16/12	16/12	16/12	16/12	

 Notes :
 1. Capacities are based on the following conditions

 1. Capacities are based on the following conditions
 Heating-Indoor temp. 20'C[80:F]D8 / 24'C[75.2F]WB

 Outdoor temp. 35'C[95'F]D8 / 24'C[75.2F]WB
 Outdoor temp. 7'C[40.6'F]

 Interconnecting Piping Level Difference of Zero
 Level Difference of Zero

 2. Capacities are net capacities
 3. Due to our policy of innovation some specifications may be changed without notification

 4. L.E.V. -Linear Expansion Valve
 Valve

ng-Indoor temp. 20°C[68°F]DB / 15'C[59'F]WB Outdoor temp. 7'C[44.6'F]DB / 6'C[42.8'F]WB Interconnecting Piping Length 7.5m Level Difference of Zero

#### Accessories

Model		ARNU07GCEA1	ARNU09GCEA1	ARNU12GCEA1	ARNU18GCFA1	ARNU24GCFA1	
Wired	Deluxe	PQRCUDS0 * (-: White, B:Blue, S:Silver)					
remote control	Standard		PDRCUSZ0				
	Simple		PQRCUCA0				
	Simple (for hotel)		PQRCFCS0				
Wireless remote control		PQWRHSF0					
Dry contact	Without case	PQDSA					
	With case			PQDSB			

Conversion formula

Kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m<sup>3</sup>/min x 35.3

### Floor Standing - Without Case

#### Weekly program (wired remote control)

If necessary, an operator can make an on/off reservation of the product for a period of one week.

#### Auto restart function

In the event of sudden power failure, the auto start mechanism saves the curren setting. It will restore the air conditioner to its previous setting when power returns.

#### Child lock function

This function prevents the tampering of the control buttons on the unit allowing control via the remote controller only.

#### Accessories



If you want to use wireless remote control, have to need wired remote control (High static, Low static, Built-in, Floor Standing)

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#### Indoor unit

#### Floor Standing- Without Case

ARNU07GCEU1 / ARNU09GCEU1 ARNU12GCEU1 / ARNU18GCFU1 ARNU24GCFU1

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Soft Dry Week State

Indoor unit

### **Specifications**

ARNU07GCEU1 ARNU09GCEU1 ARNU12GCEU1 ARNU18GCFU1 ARNU24GCFU1 2.2 2.8 3.6 5.6 7.1 Capacity Cooling kW 1,900 2,400 3,100 4,800 6,100 kcal/h Btu/h 7,500 9,600 12,300 19,100 24,200 3.2 8.0 Heating kW 2.5 4.0 6.3 2,800 3,400 5,400 6,900 kcal/h 2,200 8,500 10,900 13,600 21,500 27,300 Btu/h Cooling w 30 30 30 80 80 Power 30 30 30 80 80 Input Heating w Power Supply Ø/V/Hz 1/220~240/50 1256\*190\*639 Dimensions(W\*D\*H) 978\*190\*639 mm 19 19 19 27 27 Weight kg 35/33/31 37/35/33 36/34/32 40/37/34 43/40/37 Sound pressure levels(H/M/L) dBA+3 8.5/7.5/6.5 9.5/8.5/7.5 10.5/9.5/8.5 16/14/12 18/16/14 Air flow rate H/M/L CMM Plasma air purifying filter -\_ ---6.35(1/4) 6.35(1/4) 6.35(1/4) 6.35(1/4) Piping 9.52(3/8) Liquid mm(inch) Connection Gas mm(inch) 12.7(1/2) 12.7(1/2) 12.7(1/2) 12.7(1/2) 15.88(5/8) 16/12 6/12 6/12 6/12 6/12 Drain(OD/ID) mm Conversion formula

Notes : 1. Capacities are based on the following conditions Cooling-Indoor temp. 27°C[80.6°F]D8./ 19°C[66.2°F]W8 Outdoor temp. 35°C[95°F]D8./ 24°C[75.2°F]W8 Interconnecting Piping Length 7.5m Level Difference of Zero 2. Capacities are net capacities 3. Due to our policy of innovation some specifications m. 4. LE.V. -Linear Expansion Valve ng-Indoor temp. 20°C[68'F]DB / 15'C[59'F]WB Outdoor temp. 7'C[44.6'F]DB / 6'C[42.8'F]WB Interconnecting Piping Length 7.5m Level Difference of Zero

me specifications may be changed without notification

#### Accessories

Model		ARNU07GCEU1	ARNU09GCEU1	ARNU12GCEU1	ARNU18GCFU1	ARNU24GCFU1		
Wired	Deluxe	PQRCUDS0 * (-: White, B:Blue, S:Silver)						
remote control	Standard		PDRCUSZ0					
	Simple	PQRCUCA0						
	Simple (for hotel)	PQRCFCS0						
Wireless remote	control	PQWRHSF0						
Dry contact	Without case	PQDSA						
	With case			PQDSB				

kcal/h = kW x 860 Btu/h = kW x 3412 cfm = m³/min x 35.3

# **MULTI V.** Network solution & Accessories



- 1. Individual controller
  - Standard
  - Deluxe
  - Simple / Simple (for hotel)
  - Wireless remote controller

- 2. Simple central controller
- 3. Deluxe central controller
- 4. PC based central controller

**5. Power Distribution Indicator** 

6. BNU-LW

7. BNU-BN

#### 8. Accessories

- CNU / PI485 / Dry contact module Remote temperature sensor / Air guide Heat recovery unit / Branch

### **Network Solution**

1. Individual controller

1	Descrip				Reference				
5	ITEM		ARTCOOL	Wall Mounted	Cassette	Ceiling & Floor	Ceiling Suspended	Duct	Floor standing
	Wired remote control	PCRCUSZO				PDRCUSZ0			
		PQRCUDS0 / PQRCUDS0B / PQRCUDS0S (White / Blue / Silver)							
		Simple	PQRCUCA0						
	Simple(for hotel) Wireless remote control		PQRCFCS0						
			PQWRHSF0						

#### 2. Simple central controller

Description	Reference	Comment		
Simple Central Control	PQCSB101S0	16 Indoors		
Function Controller	PQCSC101S0	Max. 8 SCC		

#### 3. Deluxe central controller

Description	Reference	Comment
Deluxe Central Control	PQCSW502A2	Control/Monitoring, Schedule, Max 256 Indoors

#### 4. PC Based central controller

Description	Reference	Comment
Software	PQCSS513A0	Control/Monitoring, Schedule, Ventilator control, Peak Control, PDI monitoring

#### 5. Power Distribution Indicator

Description	Reference	Comment
Power Distribution Indicator	PQNUD1S00	Max 48 Indoors, 1 PDI / 1 Outdoor
Watt Hour Meter	Local purchasing Pulse output/40~500r	
6. BNU-LW		STEL
Description	Reference	Comment
LONWORKS network compatible gateway	PQNFB16A1	Max 64 indoors, Compatible ventilator

7. BNU-BN

1	Description	Reference	Comment
1	BACnet network compatible gateway	PQNFB17B0	Max 256 indoors, Compatible ventilator
_			

#### Accessories

o. Accessories		
Description	Reference	Comment
CNU	PQNFG14B0	1 CNU / 1 DCC, 16 CNU / 1PCC
Interface Unit(PI485)	PMNFP14A0	For 1 Outdoor with max 16 Indoors, 8 PI485 / 1 CNU
	PMNFP14A1	For 1 Outdoor with max 48 Indoors, 8 PI485 / 1 CNU
Dry_Contact without case	PQDSA	Using contact, On_Off control, operating / Error monitoring
Dry_Contact with case	PQDSB	Using contact, On_Off control, operating / Error monitoring
Remote temperature sensor	PQRSTA0	Detecting the exact room temperature
HR unit	PRHR020	2 Pipe-Connection
	PRHR030	3 Pipe-Connection
	PRHR040	4 Pipe-Connection

\* DCC : Deluxe central controller \* SCC : Simple central controller \* PCC : PC central controller

· FCC . FC Central controlle

### Individual controller

#### Wired remote control

#### PCRCUSZ0 (Standard)

#### Features

- On\_Off / fan speed / mode / temp
- Room temp
- Fan / plasma / swirl swing / heater
- Vane control
- Weekly reservation
- Simple reservation
- Timer function
- Auto swing / child lock
- Electric failure compensation (Max. 2 hours)
- On\_Off LED

#### Characteristics

• Full function

#### PDRCUSZ0 (Standard)

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#### Features

- On\_Off / fan speed / mode / temp
- Room temp
- Fan / plasma / humidification / heater
- Fan auto
- Vane control
- E.S.P function
- Weekly reservation
- Simple reservation
- Timer function
- Auto swing / child lock
- Wireless remocon receiver
- Electric failure compensation (Max. 2 hours)
- On\_Off LED

#### Characteristics

• Full function / Wireless remocon receive function

PQRCUDS0 (Deluxe, White) PQRCUDS0B (Deluxe, Blue) PQRCUDS0S (Deluxe, Silver)



#### Features

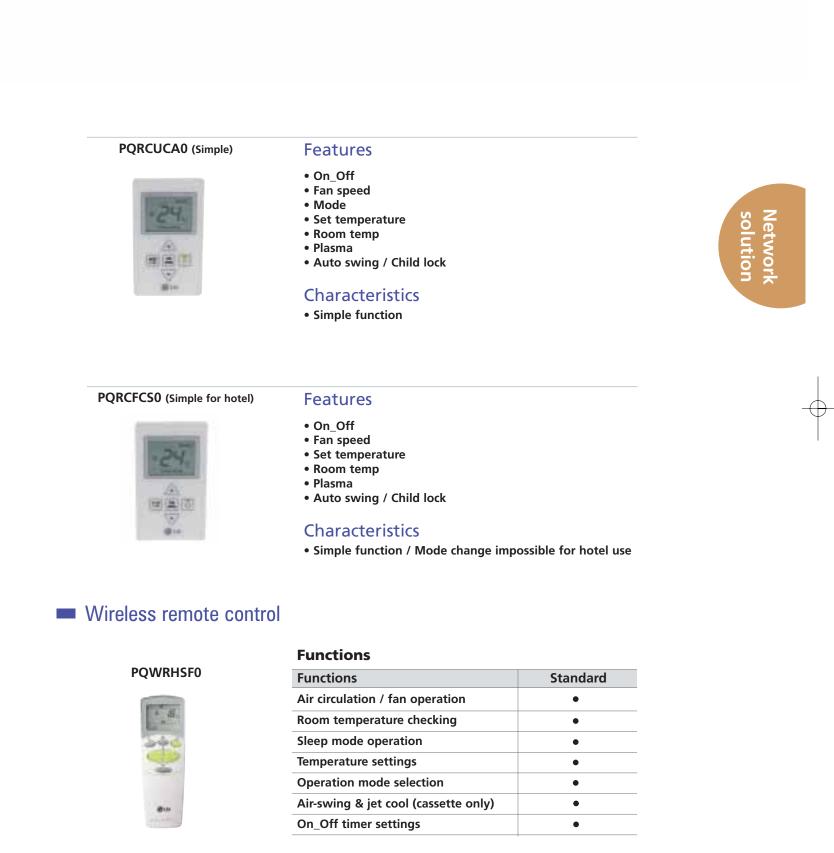
- On\_Off / fan speed / mode / temp
- Room temp
- Fan / plasma / swirl swing / heater
- Vane control
- E.S.P function
- Reservation (simple weekly)
- Simple reservation
- Timer function
- Auto swing / child lock

#### Characteristics

• Touch screen / LCD back\_light

• On\_Off

#### **Network solution**



Air conditioning system \_91

### Simple central controller

#### Simple central controller

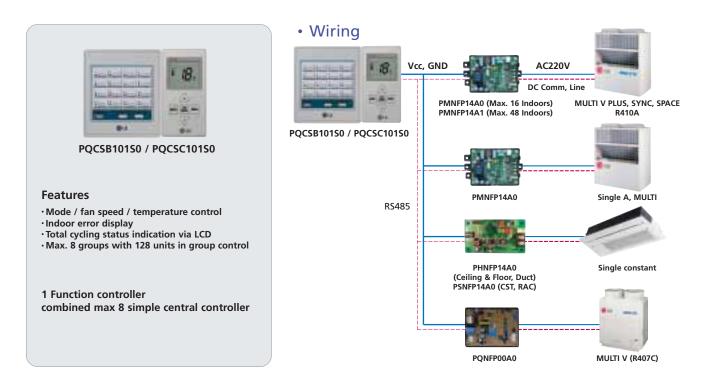
- · A central controller for managing small sites
- · Control maximum 16 indoor units

Features Individual operation (one button one A/C) On operation (Max. 16 indoors) Off operation (Max. 16 indoors) Individual lock function (1 unit) Group operation Group On_Off Group lock function (16 units) Sequential starting to protect over current Diagnostic function (LED blinking)	
	<ul> <li>Individual operation (one button one A/C) <ul> <li>On operation (Max. 16 indoors)</li> <li>Off operation (Max. 16 indoors)</li> <li>Individual lock function (1 unit)</li> </ul> </li> <li>Group operation <ul> <li>Group On_Off</li> <li>Group lock function (16 units)</li> </ul> </li> <li>Sequential starting to protect over current</li> </ul>

Additional accessory Interface unit (PI485) : PMNFP14A0 (for 1 outdoor with max 16 indoors, 1 PI485/1 outdoor) PMNFP14A1 (for 1 outdoor with max 48 indoors, 1 PI485/1 outdoor)

#### Function central controller (PQCSC101S0)

 Control & monitor the operation status of indoor units in company with a simple central controller (PQCSB101S0)



### **Network solution**

### **Deluxe central controller**

#### Deluxe central controller

· A central controller for managing large sites - Deluxe central controller can control max 256 indoor units



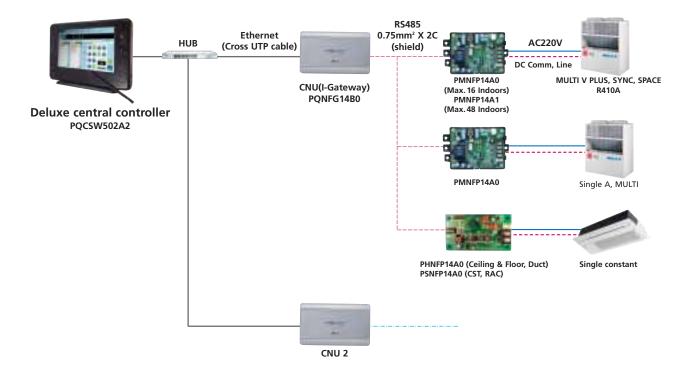
#### Features

- •7 inch LCD panel ·Individual/integrated operation/monitoring (Max. 256 indoor units) • Group management Self-diagnosis function Semi-permanent life / convenient maintenance
- Easy update
- Management cost down
   Convenient GUI / touch screen
- Schedule automatic operation management

**Network** solution

Additional accessory
Interface unit(CNU) : PQNFG14B0 ( 2 CNU / 1 DCC)
Interface unit(PI485) : PMNFP14A0 ( For 1 outdoor with max 16 indoors, 16 PI485 / 1 CNU)
PMNFP14A1 ( For 1 outdoor with max 48 indoors, 16 PI485 / 1 CNU)

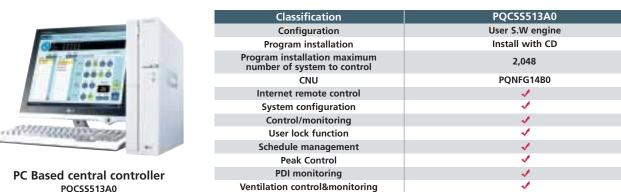
#### Wiring



### PC Based central controller

#### PC Based centroller

• A central controller for managing huge sites - PC Based central controller can control Max. 2048 Indoor units



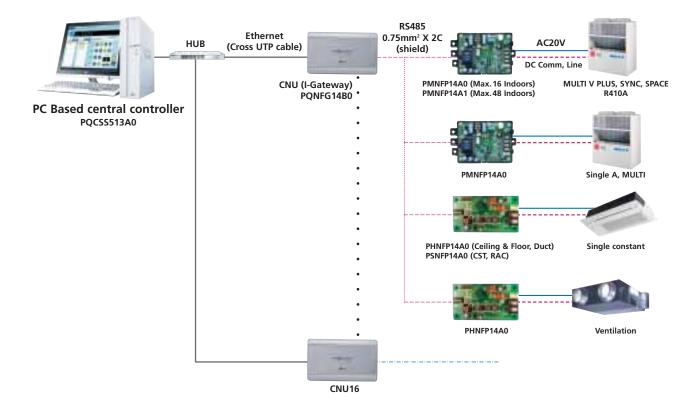
PQCSS513A0

Additional accessory

Interface unit (CNU) : Interface unit (PI485) :

PQNFG14B0 (16 CNU / 1 PCC) PMNFP14A0 (For 1 outdoor with Max. 16 Indoors, 8 PI485 / 1 CNU) PMNFP14A1 (For 1 outdoor with Max. 48 Indoors, 8 PI485 / 1 CNU)

#### Wiring



### **Network solution**

# **PDI** (Power Distribution Indicator)

#### PDI (Power Distribution Indicator)

• This device is an indicator for power consumption of the multi type Air-conditioner used for common power line.

PQNUD1500 • Additional accessory Interface unit (PI485): PMNFP14A0 (	• Ind • Acc • Acc • Per • Dat • Ma • Cor • App	tures icates power consumpt umulated total power o umulated / current power od accumulated power a back-up on EEPROM o x 48 indoor units inectable to PCC olied products : MULTI	consumption ver consumption o consumption even if power turn	f each indoor unit		Network solution
	for 1 outdoor with M			Digital WHM (Local purchase) AC220V		
		AC 200V-240V 50/60Hz	PQNUD1500	RS485 PMNF	MULTI V PLUS system	
282	CAREER .	COMPANY OF THE OWNER	265			

# BNU-LW (Building network unit-LONWORKS®)

#### BNU-LW (for the use in LONWORKS<sup>®</sup>)

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-B		participant.		E
1 .	100	-		1
28 3	100.1		100	-1

- Easy interface between BMS and LG air conditioner
  - Independence of BMS under the standard BMS : Operation system based on LNS (LonWorks<sup>®</sup> network service)
    - No network installation needed
    - Very widely applicable protocol (LONWORKS®)

<LonMark certification version 3.3>

0 if	Connecti     Process a     - 64 unit     - valid ac     self inst:     - setting     - diagnos     Connecti	Connection to LONWORKS <sup>®</sup> using LONWORKS <sup>®</sup> protocol and LG Air-conditioner protocol Process ability - 64 units( including indoors and ventilators) - valid address for each unit : 0x00 ~ 0x3F Self installation verification function using internet (web server included) - setting gateway - diagnosis of communication status on LG Air-conditioner network Connection to remote total management System (LG system) LonMark certification (version 3.3)			
		Controlling	Monitoring items		
and the second second		n/Off command	On/Off status report		
COLUMN TO AN ADDRESS		ation mode setting In Speed setting	Operation mode status report Fan Speed status report		
		Lock setting	Lock status report		
312		Air flow setting	Air flow status report		
	S	et temp. setting	Set temp. status report		
PQNFB16A1	User mod	e setting (for only ventilator)	Current Space temp. status report	t	
			Error status report		
			User mode status report (for only ventilat	tor)	
	<b>y</b> :PMNFP14A0 (for 1 outdoor wi PMNFP14A1 (for 1 outdoor wi				
Interface unit (PI485) : Wiring	PMNFP14A0 (for 1 outdoor wi		BMS system		
Interface unit (PI485) : Wiring ONWORKS <sup>®</sup>	PMNFP14A0 (for 1 outdoor wi PMNFP14A1 (for 1 outdoor wi		BMS system	-	
Interface unit (PI485) : Wiring ONWORKS <sup>®</sup>	PMNFP14A0 (for 1 outdoor wi PMNFP14A1 (for 1 outdoor wi		BMS system	eccipe.	
Interface unit (PI485) : Wiring ONWORKS <sup>®</sup>	PMNFP14A0 (for 1 outdoor wi PMNFP14A1 (for 1 outdoor wi		۵ 🖿	Jtility control	
Interface unit (PI485) : Wiring ONWORKS <sup>®</sup>	PMNFP14A0 (for 1 outdoor wi PMNFP14A1 (for 1 outdoor wi	th Max. 48 Indoors)	Remote checking L		
Interface unit (PI485) : Wiring ONWORKS <sup>®</sup>	PMNFP14A0 (for 1 outdoor wi PMNFP14A1 (for 1 outdoor wi	Lighting control Indoor unit : Max. 6 Indoor address : 00	Remote checking L		
Interface unit (PI485) : Wiring ONWORKS <sup>®</sup> Network BNU-LW	PMNFP14A0 (for 1 outdoor wi PMNFP14A1 (for 1 outdoor wi LON comm. line	Lighting control Indoor unit : Max. 6 Indoor address : 00	Remote checking L		

LGAP applied Air-conditioner

#### **Network solution**

### BNU-BN (Building network unit- BACnet )

#### BNU-BN (for the use in BACnet)



#### Features

- Through embedded web control function in BACnet one can access the airconditioner and external devices through internet.
- It can control 256 indoor units. ( A/C or Ventilator )
- External devices such as fire alarm, motion detector can be connected to gateway and their function can be interlinked with airconditioner operation.

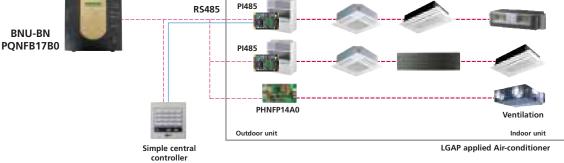
Controlling	Monitoring items		
On/Off command	On/Off status report		
Operation mode setting	Operation mode status report		
Fan Speed setting	Fan Speed status report		
Lock setting	Lock status report		
Air flow setting	Air flow status report		
Set temp. setting	Set temp. status report		
User mode setting (for only ventilator)	Current Space temp. status report		
	Error status report		
	User mode status report (for only ventilator)		

Network solution

PQNFB17B0

Additional accessory
Interface unit (PI485) : PMNFP14A0 (for 1 outdoor with Max. 16 Indoors)
 PMNFP14A1 (for 1 outdoor with Max. 48 Indoors)

• Wiring BACnet Network
BACnet comm. line
BACnet comm. line
BACnet comm. line
Lighting control
Lighting control
Remote checking
Utility control
Indoor unit : Max. 256 units (Air-conditioner & ventilation) Other BACnet devices
Indoor address : 00 ~ FF
BNU-BN
BNU-BN



# CNU (I-Gateway) / PI485

**Features** 

#### CNU (I-Gateway)



Part description

PI485 connection BUS\_A : PI485 A terminal[+] BUS\_B : PI485 B terminal[-]



Adaptor connection DC 9V (supplied)

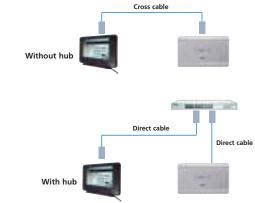
**RJ45** connector Connected with the HUB Deluxe central controller

AC/DC adaptor



• Used with deluxe and P/C based central controllers.

CNU converts the ethernet protocol into RS 485 protocol and vice versa.



#### PI485



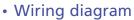


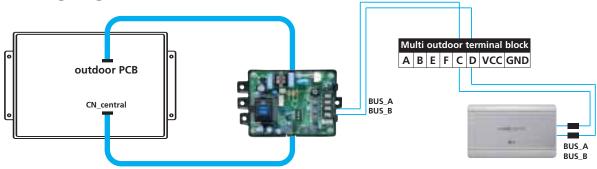
PMNFP14A1



PI485 converts the protocol of air-conditioner to the 485 protocol for central controller.

- Device for simple/deluxe/PC controllers.
- Supports communication wires length flexibility up to 1km. Different types of PCB for different products.
- -Option select (LGAP, CAC, RAC) -LED display (Communication state) -Four different types
- Available Max. 16 Indoor units : PMNFP14A0
- Available Max. 48 Indoor units : PMNFP14A1





#### **Accessories**

### Dry contact module **Remote Temperature Sensor**

#### Dry contact module



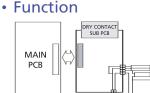


#### Features

- Several kinds of devices can control & monitor our air-conditioner
- by using dry contact very easily. On\_Off control by contact for example
- Motion detector sensors in the room
- Timer function
- Hotel key switch
- Operation state monitor
   Error state monitor

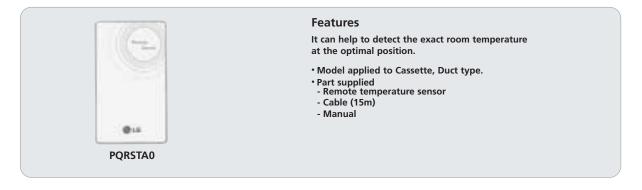
Function

Two modes of dry contact are automatic operation and manual operation. Automatic operation and manual operation can be changed by pressing the reservation cancel button of the wireless remote controller in a series of 3 times within 3 minutes.



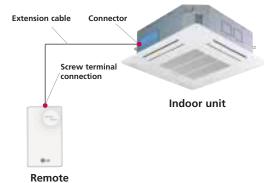
Accessories

#### Remote Temperature Sensor

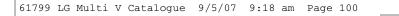


#### Wiring diagram

- 1. Wire to the control box in the indoor unit by removing the existing thermistor and connect the extension cable its place.
- 2. Cut the extension cable to the appropriate length and connect the screw terminal of the remote sensor.
- 3. In the case of wired remote controller installed, set the temperature sensing slide s/w at MAIN mode.



temperature sensor

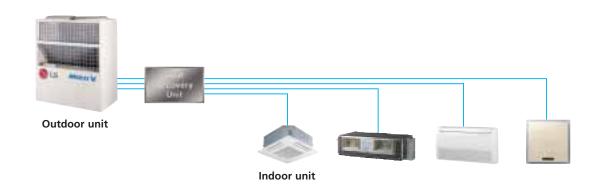


# Heat recovery unit

#### Heat recovery unit (Applied to MULTI V. SYNC R410A)

Max. 4 indoor units can be connected by module design.
 Due to the automatic search algorithm for piping detection, easy installation and effectiveness is improved.
 Subcooling cycle in HR unit makes the system efficiency maximum.

PRHR040
PRHR040 (4 Pipe-connection)



Model Max. connectable number of indoor units				PRHR040		
				4		
Max. connectable capacity of indoor units (Per port/unit) k			kW	14.1 / 47		
Nominal Input	cooling		kW	40		
	heating	heating		40		
Net. weight			kg	21		
Dimensions (WxHxD)		mm	801x218x617			
Piping	Indoor	liquid	mm(inch)	9.52 (3/8)		
connections	unit	gas	mm(inch)	15.88 (5/8)		
	Outdoor	liquid	mm(inch)	12.7 (1/2)		
unit	unit	low pressure	mm(inch)	28.58 (1 1/8)		
		high Pressure	mm(inch)	22.2 (7/8)		
Power supply		ø /V/Hz	1/220 ~ 240/50			

#### Accessories

Accessories

### **Branch**

Connection of liquid (Gas) pipe in outdoor units

#### Header

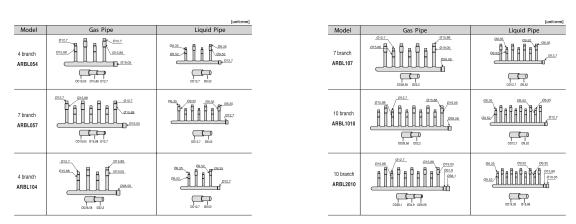
Model

ARCN

5 T 0 28.58

Ø15.88 OD19.05

	Multi V PLUS, Multi V SPACE				
	Gas pipe	Liquid pipe			
Header	4 branch ARBL054				
	7 branch ARBL057				
to total	4 branch ARBL104				
A A A A A A A A A A A A A A A A A A A	7 branch ARBL107				
	10 branch ARBL1010				
	10 branch ARBL2010				



#### Connection of liquid(gas) pipe in outdoor units & Y branch

	Multi V PLUS		Multi V SYNC			Multi V SPACE	
	Gas pipe	Liquid pipe	Low Pressure Gas Pipe	Liquid Pipe	Hige Pressure Gas Pipe	Gas pipe	Liquid pipe
2 Outdoor Unit	ARCNN20		ARCNB20			-	
3 Outdoor Unit	ARCNN20 ARCNN30		ARCNB20		-		
5 Outdoor onit			ARCNB30		-		
Y Branch	ARBLN01620 ~ under 16.0kW		ARBLB1620 ~ under 16.0kW		ARBLN01620 ~ under 16.0kW		
	ARBLN03320 ~ under 33.0kW ARBLN07120 ~ under 71.0kW		ARBLB03320 ~ under 33.0kW		ARBLN03320 ~ under 33.0kW		
XXXXX			ARBLB07120 ~ under 71.0kW				
	ARBLN14520 7	1.0kW or more ~	ARBLB14520 71.0kW or more ~				

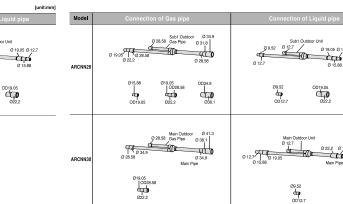
#### **MULTI V. PLUS** Y Branch (2 Outdoor units)

d qo

4

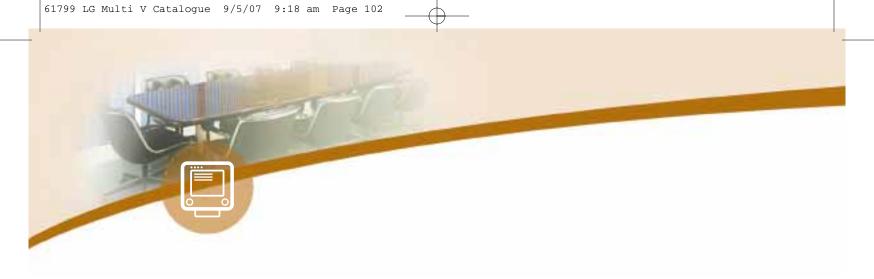
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#### **MULTI V. PLUS** Y Branch (3 Outdoor units)

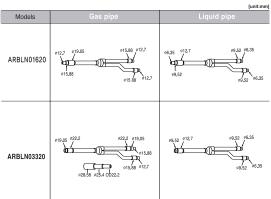


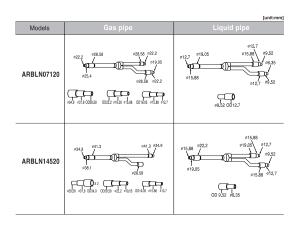
Air conditioning system \_101

[unit:mm]

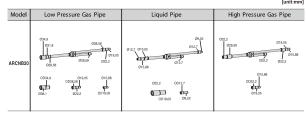


#### MULTI V. PLUS Y Branch (Indoor unit) MULTI V. SPACE

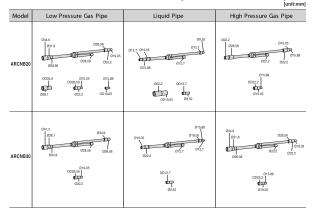




### MULTI V. SYNC Y Branch (2 Outdoor units)



### MULTI V. SYNC Y Branch (3 Outdoor units)



#### **MULTI V. SYNC** Y Branch (Indoor unit)

			(unit:mm)
Models ARBLB01620	Low Pressure Gas pipe	Liquid pipe	High Pressure Gas pipe
ARBLB03320	91805 4922 4929 4939 415.88 415.89 415.89 415.89 415.80 410.80 40	1127 1132 1135 1127 1132 1135 1127 1132 1135 1132 1135 1132 1135	*15.00 *15.00 *12.7
ARBLB07120	422 403.58 423 403.58 423.4 423.4 423.58 425	#12.7 #13.05 #15.26 #15.26 #15.26 #15.27 #65.22 #15.27 #65.22 #15.27 #65.22	18,05 18
ARBLB14520		e15.40 e15.40	ellas engo

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### Accessories



Air conditioning system \_103



### LG Electronics Inc.

#### Air Conditioner

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http://www.lge.com

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